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Yokohama, Japan.

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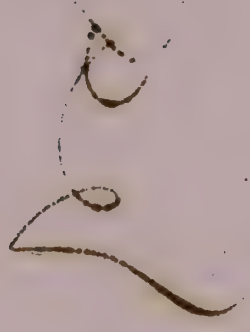

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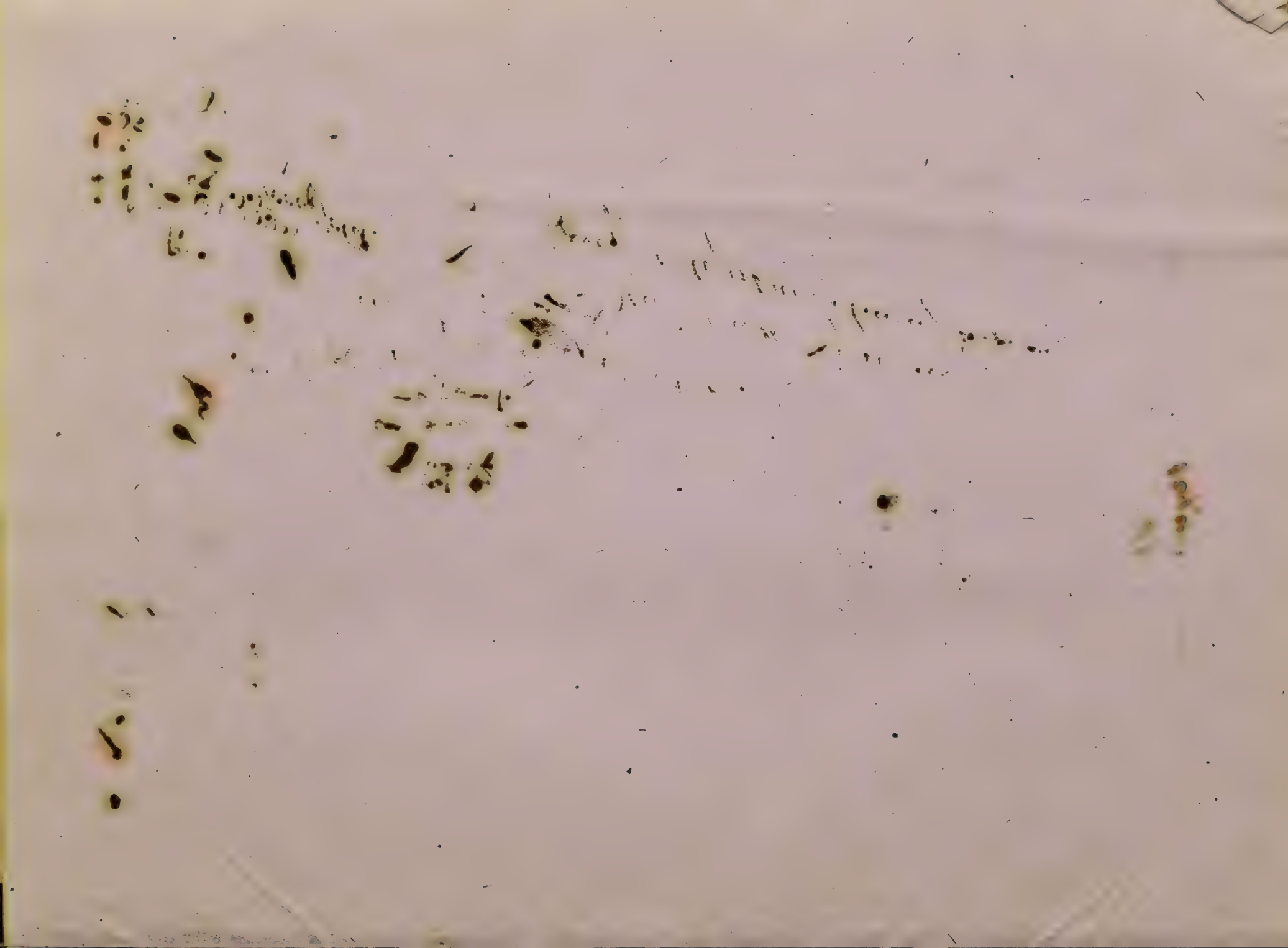


Saunders, Dawson, Shiba
22 Feb. 876.

Birrell & Co.
Yokohama.

Gentlemen:

If you have a dozen
fine neck shirts, and collars
to match, & inches around
you may send them
with the other things, and

Yours truly,
Saunders, Dawson, & Co.

Saunders, Dawson, & Co.
22 Feb. 876.

E. A. Cruickshank Esq.,
Yokohama.

Dear Sir,

I forgot to say yesterday
that I should be glad if
[illegible] & [illegible]
hospital if it be not convenient
to you. It will be
[illegible]
[illegible]

Saunders, Dawson, & Co.

Jouin, Daimon, Shiba, Yedo, 23 Feb. 1872

Dear Mary:

No mail has come from America as
all letter of a fortnight ago; & that I have nothing
upon to answer, and besides nothing particular
about. For my life has for sometime been very
the varied one & very much occupied with wom
seeing scarcely anybody. But the disagreeable
weather, the most snowy and cold they say for
by years at least, had a short intermission after
ge and I began to call a few fri[illegible] on
[illegible] had been so kind as to come here
and times through the winter. Hochstetter Godfrey
el Freiberg fellow student, now the foreign Lead
ining Office with Government here, was one of the
The Belkemas have often invited me to dine with
ceremony of Sunday evening, and the
made it a standing invitation, and I went
Sunday for the first time on that Nothing
baby about Christmas time, as I believe I
ed, and my visits were interrupted for
a month. [illegible] Good folks, come
[illegible] with among the foreigners here. Mad
[illegible] & Dr. H. Partees, at Kanagawa
[illegible] and his wife and
[illegible]

Dear Mary:

official and the younger was formerly my chief Japanese assistant and is now to become so again. Both are very good fellows and have been much interested in my reengagement here. The matter was at length fully settled three days ago and I am to go tomorrow afternoon to the signing of the papers in the presence of the Okubo Minister of the Interior or Home Department (Naimusho). I have already given you some of the chief particulars of the agreement. I [illegible] has been very careful [illegible] in as clear language [illegible]ossible for the [illegible] control of my work and of my assistants of whatever kind; and the government has certainly been liberal enough in all such promises this time; and, as they know probably all about my [illegible] troubles and fighting, they have no doubt the intention of sticking to their present promises. Everything now looks like smooth sailing; but, on the other hand, as the former obstacles are removed and so much confidence is placed in me, the weight of responsibility seems to become a little greater, so that after all there is no great chance to feel elated. I am also rather sorry not to have a little holiday before going into the harness again; but we have to go into the field at the beginning of April and to finish our Kaitakushi work before that. My term in the Naimusho begins indeed on the first of this month. The young men have had [illegible] order of removal for a year to the Naimusho from the 1st of April, and in their zeal have added [illegible] [illegible] to their daily work in order to finish up in time. [illegible] [illegible] good fellows indeed; and some day no [illegible] they will be very important members of the government [illegible] here, though they are yet apparently [illegible] [illegible] [illegible] has made my [illegible] [illegible] [illegible] hope soon to have [illegible] [illegible]

3

Tsuruya, Shiba, 26 Feb. 1876.

My dear Mr. Eminkhardt:

I have just chanced upon across the old receipts for the money paid for that Nanking and find that I was [illegible] what this value, and that it was in all (Sm. 1,500) fifteen hundred and five ten!

If the boy did not go by the last steamer it may not be too late to correct the former statement of value.

I shall probably leave Japan for Shanghai within a few days, [illegible]

4

Sunion, Daemon, Sheba, Star,
1876.

My dear Mrs. Barbara

I have
made inquiries about the individual
in question but although many persons
have seemed to speak quite freely
I could learn of no special improprie-
ty of conduct and of nothing
[illegible] general character beyond that
[illegible]
[illegible]
[illegible] disclaimed. If [illegible]
[illegible] was brought to you con-
[illegible]

Hoping that you will be able
to disprove it shortly, I am

Yours truly
[illegible]

Journein, Daimon, Tuba,
9 March, 18[illegible]

Dear Mary:

The mail steamer has arrived [illegible]
re/kang on its way to America with [illegible] pas-
sengers so that I have hardly time more than to thank
you for your favor of the two-[illegible]th [illegible] ja. may with
its enclosures including the [illegible] of Father's will
expected no request at all for [illegible] and
revolving in my [illegible] chiefly in the line
of what to do with the money he made, but have
[illegible] with a heavy pressure of
is give the matter much consider-
[illegible] I cannot be anything, as [illegible]
[illegible] mind about you "settling" to
being a particularly opposed to
[illegible] drives partly from having
two [illegible] at once, as it were: for in the
[illegible] up our Katakuchi work there
[illegible] preparations to make for the
[illegible] Room, and it is evi-
[illegible] prepared [illegible] year
the [illegible] year and [illegible]
[illegible] to proceed [illegible]

8

[illegible] into my contract that the yards estimate
[illegible] determined beforehand on consultation with
the rough drafts of sections that have just been
forwarded to me are (for the silvering at least) a pretty
[illegible] approximate one, and in referring to paragraph 6 of
I shall consider that I have saved from the full
amount of my salary and expenses for the whole
[illegible] so that anything [illegible]
[illegible] in addition to these data,
my Contract this work that has been a great am
[illegible] many my assistants owing to thinking
[illegible] this goal for a quick despatch of the work
[illegible] some of hours extra each
[illegible] not pitched enough for such unusu
[illegible] Mr. Nasmyth, indeed, is so seriously
[illegible] Examination, which has caused his
[illegible] work, that it is doubtful whether he
[illegible] will, at best, be in my
[illegible] I should have mentioned before
[illegible] send you a copy of the photographs
[illegible] that Exhibition. You will see there
[illegible] nothing out of [illegible] but you must
[illegible] the young men are hard [illegible]
[illegible] for them very
[illegible]
[illegible]

Tounin, Daimon, Shiba, Yedo; 1[illegible]

Dear Fanny:

Your most welcome favor of six weeks surprised me just before (as I was believing for the hundredth time) my writing them; but now I have the melancholy satisfaction of answering three letters at once, instead of only two. It is perhaps needless to explain the profound contrition I have so long felt at not having answered your interesting letter of three years ago when you were on the eve of your first departure but have only to assure you that it never was otherwise than deeply interesting to me, and as I [illegible] just after the [illegible] of Rio Janeiro, when you were in the full enjoyment of happy results of the experiment. Your present letter, readily, bearing from it kind words you use about [illegible] of "Kate," that kind and gentle soul, so [illegible] both in [illegible] and in health. — Your account of the remarkable bank robbery is graphic and startling; perhaps too much helped that all the money can be recovered, but as the news must have been telegraphed [illegible] within a very few hours, we may at least [illegible] of the rascals and a good portion of the money be recovered soon. — But the most interesting portion of your letter is the news you send [illegible] a little about my own doings when I am going to bring you home an "Indian." You must indeed have been "excited" at the [illegible] so far as to bet a pound. I can only be exceedingly [illegible] you entitled to the glory. For my part, if I were to [illegible] I should feel it hard to part with so [illegible] and I know you can [illegible]

[illegible]

8

ce of clerical resignation or meek submission. Your
of the matter surprises me the more from the singular
evidence that a story to the like effect was brought to
my outspoken friend Mr. Bellamy here at almost
very moment you were writing. My curiosity was
naturally very much excited as to the identity of
[illegible] but, as he appeared wholly unable
[illegible] me on that point, I was thrown back entirely upon
my own resources in trying to conjecture who was meant
& what was the origin of the story. After some quiet
reflection no explanation seemed more likely than that
my little waiting maid, Ototo, fourteen or fifteen years
old, but large and perhaps in stature for her age, had
[illegible] to entertain some ridiculous notions in regard to me
[illegible] at the instigation of her
[illegible] wife, for you know mothers have sometimes
large notions in point of their daughters; but you will pro-
bably see how wholly incorrect my past surmises were
when I recall however that for a few days past there
[illegible] something a little peculiar in the child's man-
ner towards me, consequent upon my sending her
to a new and dearer school that we had discovered in
our neighborhood, where at length she was really begin-
ning to learn something of English, Arithmetic and Geography,
[illegible] & Japanese & to read & learn Japanese
[illegible] Taking from a good opportunity I mentioned
to her that I had been much gratified at hearing from Mr.
Bellamy that I was going to be married and that I was
desirous to see the bride. She had no intimation
but seemed less surprised than I was, and the
[illegible] consciousness of her manner continued for some
time in a manner that arose probably either from the new
[illegible] education she was getting or from a desire to
[illegible] for what she considered extravagant expectations
[illegible] meeting. I, for my part, always keep
[illegible] Breakfast, with a
[illegible] Shoulders,

ways beyond its Space. Even now, I can hardly
plain you hearing of the story except by the fact of
old classmate's visit last winter and his observation
the excellent terms on which the little girl and I were; for
you know we Americans are not apt to consider the
marriage of a household servant & her master as altogether
out of the question. He used to tell her she was a nice little
girl" and ask her if she was going to America; but happily she could not understand a word he said, and
did not interpret. Well, some days after Mr. Bockhaus
visit the child had at length her chance for an elucidation of what she had in her mind in regard to my
marrying. A young married lady Japanese lady
ine was calling on me, and Otoki had brought in
the diminutive teapot and tea cups with which we do
visitors and we were all chatting, when by chance
or by their forecordination, the propriety of my getting
ried was brought up; and you will easily imagine how
rare it is for such a subject to enter into my thoughts
conversation. Otoki immediately raised her eyes
and with flushed face and excited, earnest manner
made so long and rapid a speech to my guests
(to my imperfect knowledge of Jap
follow her, and indeed had to learn the particulars
more thoroughly by inquiries afterward. It seems
[illegible] of a young lady about eighteen years
of stature, not handsome, but very amiable and
[illegible] daughter of a Japanese (or official) who had a
[illegible] clerk a month, I understood), but who died
[illegible] within a few months of his wife's death
[illegible] daughter to the care of her grandmother
[illegible] in a distant part of

...ster, Oneto (McSterly pronounced) was already proving the truth of what an experienced and observing friend of mine remarked to me some years ago, that "all women are matchmakers." She really seemed to feel quite responsible about getting me married off properly, and argued that it must be rare indeed that a young Japanese lady of high respectability would be willing to leave her relatives and friends (even if she had already lost her parents) and go to a strange country so far away to live; if I could only agree to make my home in Japan. There would be "any quantity" of such young ladies very anxious to marry me. For instance, said she, there was a girl of ... who about seventeen or eighteen in her Japanese school ... daughter of a man as rich as to own a small block of houses that he rents, who had, through Oneto, avowed her willingness to marry me, but only on that condition. I figured to myself three young innocents, gravely discussing the subject in some interval of battledore and shuttlecock at school recess. You will perceive at least that my servants who know me in some respects as very few men intimately than is hardly conceivable in America have not given me altogether a bad name among their friends. With regard to place of residence I would not be cold-hearted enough to tying myself down to one side of the world or the other, but taken undilluted, you know, both for the example of marrying outside of their own village and, perhaps by inheritance, the Eden did not seem wholly unattractive to me, and I argued that in these days of steamers and railroads it would not be impossible to live a return now and then to Japan. Mr. ... asked me if there were not young ... Japan that I would marry ... here seemed inclined ...

those customs I explained much to the amusement of my Japanese hearers; for it seemed to them even worse than the customs here, but they did not realize what religious zeal can accomplish. Although I argued the matter in a general way I objected to the two ladies in question that they possessed not possess the combined attractions of great comeliness and amiability; but the married lady insisted that such attractions never were combined, and that if the wife were too handsome it was apt to lead to separation. The subject was dropped; but a couple of weeks later the same visitor was here again, and talking of this and that she suddenly said she had "found a girl," and explained that she was a nice young woman for me to marry. A young lady of seventeen or eighteen, tall, not remarkably handsome but better looking than my visitor herself (which of course is saying a country girl) and wonderfully intelligent as well as extremely amiable, a country girl, living in a distant part of Japan, in the province of my visitor's husband, (my good friend) in short his young sister, whom my visitor had herself never yet seen, but who had declared herself willing to marry a foreigner, and who was coming up to Tokio next May. Perhaps a photographic likeness, not of course, would be enough for me to decide by. Well, well, this is coming to pretty close quarters, indeed. My friend the Calcutta pundit quotes a "mystic Persian proverb" to the effect that "love comes by hearing as well as by sight" and how can understand therefore that I am already quite sufficiently in love with a picture. Nevertheless I am written with so wise a decision. Nevertheless I am no great encouragement to the gentle peacemaker who would have laid the greatest stress on the [illegible] difficult." Even if I were not, my absence [illegible] from April until November, would be a great [illegible] progress in the affair. [illegible]

12

intelligence she could rapidly
make any guidance! You may perhaps imagine
the Japanese ladies are swift to take advantage of
that leap year; but it is customary in any year for
the marriage proposal to come from the lady's side and
[illegible] between. As the proposal is [illegible]
acquaintance is very slight, and before the heart of
very much set upon the matter, a refusal is not so
serious an affair as it is in America. On
the other hand, too, the decision is perhaps more speedily made
on grounds of prudence and good judgment
and [illegible] fancy and with less extreme anxiety and
[illegible] as to the precise "compatibility" of the future
[illegible] taking it for granted in general that there
will be [illegible] agreeable one even without
[illegible] preliminary acquaintance, just as our
[illegible] are necessarily good ones and we often
without ever having had the advantage of
an acquaintance nor any selection given
beforehand. The general amiableness and unfailing
[illegible] good humor and invariable politeness of
the Japanese and the humble submissiveness that is
[illegible] in the bone of the Japanese women make domestic
relations a little less uncertain than it is in some countries
and if you consider in addition the extremely fascinating ways
of the Japanese ladies and enchanting graces of at least a few
of them you will easily understand that even a well-
[illegible] foreigner might find his fastidious taste satisfied by
such alliances. But I must forbear & draw
upon [illegible] to a still greater extent instead of
upon them. I have been the resolution to write to you
[illegible] matters, in part to confidential, premising
that they will at least not get into the newspapers.
[illegible] already in expectation of a [illegible] and believe me

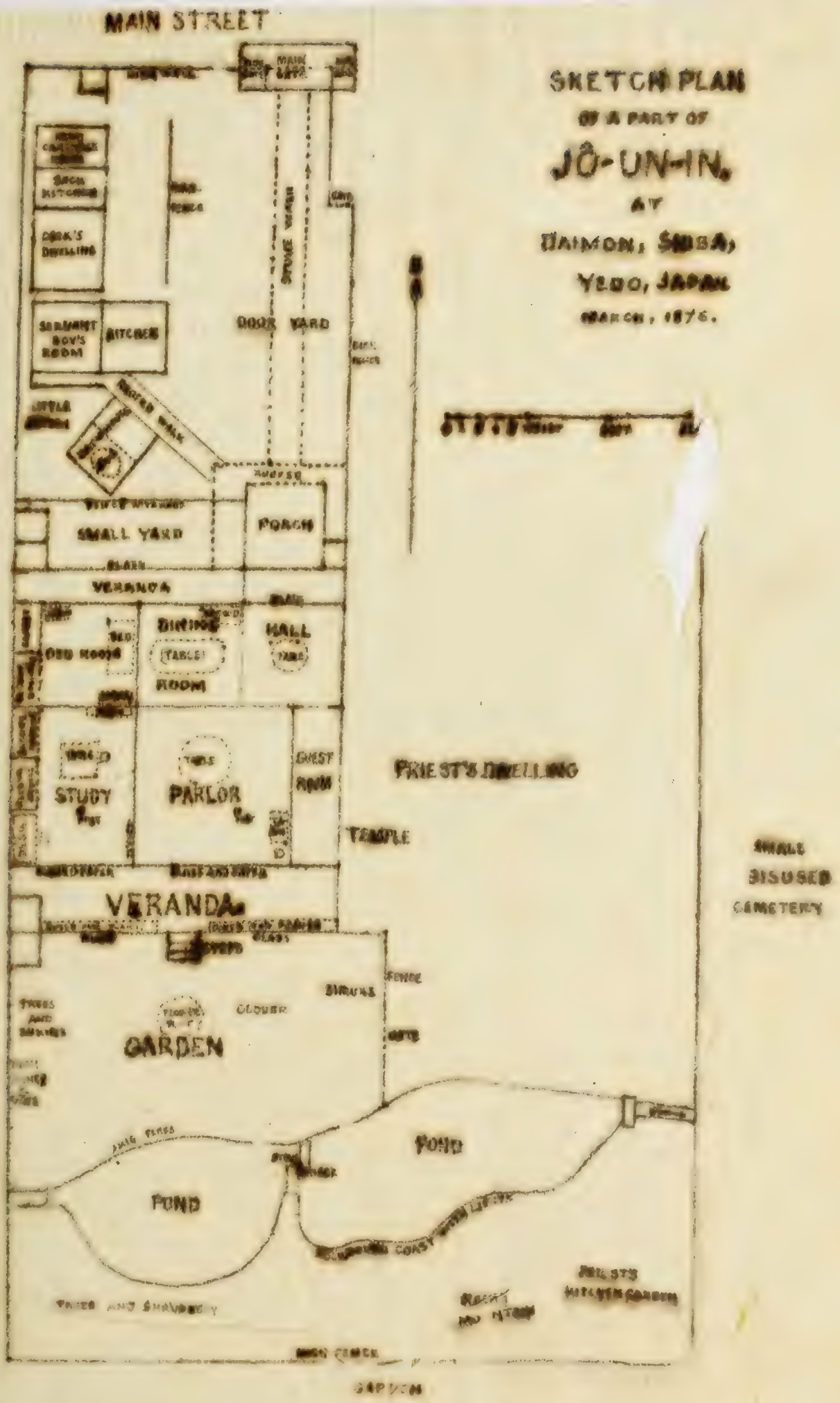
Mrs Susan Sidebotham

My dear Friend

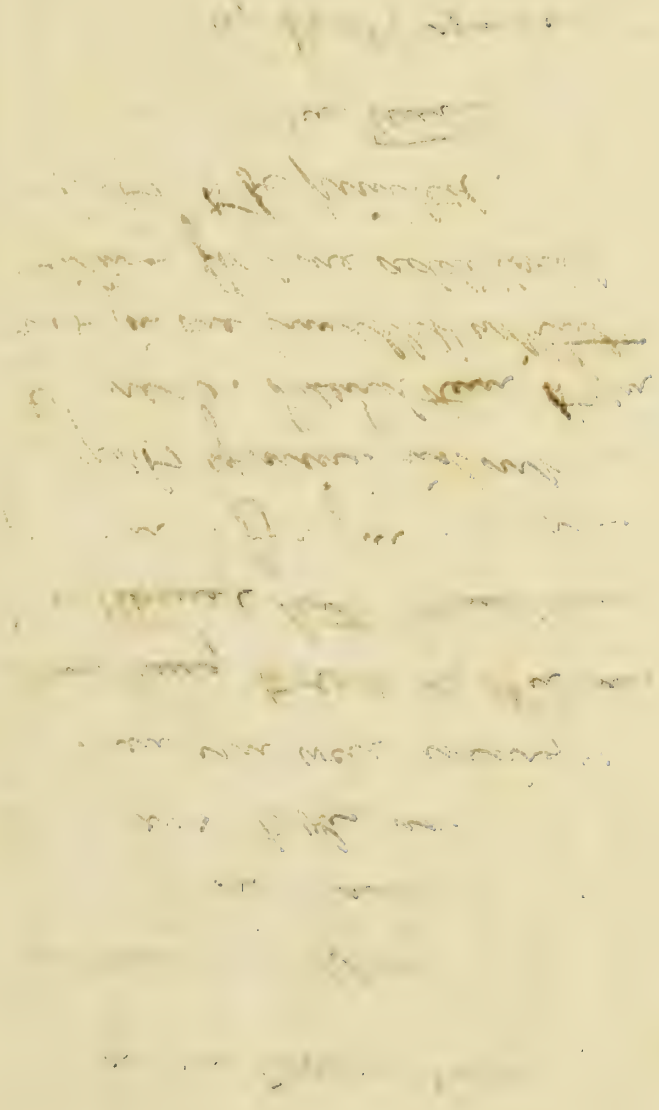
I owe you ten thousand thanks for your
nice long letter received a few days ago; and if by long
practice I had not become severely callous to the effects of
the mortification I must feel at this second full proof
of your unaccountable epistolary evidence of
your kindness would doubtless be most serious. As
it is however I have to confess with deep contrition that
your last letter did not come to my hand until some
[illegible] you imagined it would go [illegible]
[illegible] and you were
[illegible] and I have consequently been
[illegible] I last go Spaniard) in fear that
[illegible] answer to your kind enquiries
[illegible] letter might cross on the
[illegible] & actually both of
[illegible] must indeed be a hardened
[illegible] shameless delinquent
[illegible] But I assure you that in future I will do so
[illegible] that you write so fully in regard
[illegible] to my situation & the
[illegible] single particular a wish was
[illegible] I never even suspected that the
[illegible] passed away, and was
[illegible] I was waiting
[illegible] very much obliged.
My Charlotte
[illegible] am convinced & certain that you did not
[illegible] & I should instead of
[illegible] & [illegible]
[illegible] favour to do
[illegible]

I begin to feel in a small way as if I were proud of treading in my master's (your husband's) footsteps, for I have ~~different two~~ offices a mile apart to correspond to three or four about [illegible] he commonly has (one of his [illegible] is a hundred miles away). Also the [illegible] [illegible] of work corresponds in some degree, for we are now in season as we can be finishing up the large maps of the [illegible] [illegible] and at the same time a couple of other assistants' preparations are [illegible] for the coming [illegible] in the province of Echigo (near Niigata) the most [illegible] oil region of Japan. [illegible] [illegible] however [illegible] [illegible] [illegible] and it is [illegible] that we shall have [illegible] [illegible] [illegible] students, [illegible] in the course of [illegible] year [illegible] expect to become regular assistants. We will [illegible] for the coming season probably seven students, an assistant geologist, one chief assistant geologist [illegible] [illegible] assistant [illegible] and one clerk (Adachi, who began with me as servant boy three years ago, but has been my [illegible] for a year and a half, the last year [illegible] the [illegible] of the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] could be possible. There will also very likely be in addition a boring or digging party of laborers under another assistant (my good friend [illegible], [illegible] [illegible] [illegible] boring company were bankrupt tried [illegible] with American machinery and that plan [illegible] [illegible] [illegible] [illegible] [illegible] satisfactory [illegible] [illegible] [illegible] by horse power could be [illegible] [illegible] [illegible] [illegible] [illegible] far more cheaply [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] can be [illegible] [illegible] [illegible] [illegible]

MAIN STREET
VERANDA
GARDEN
POND


MAIN STREET
SKETCH PLAN
OF A PART OF
JÔ-UN-IN.
AT
DAIMON, SHIBA,
YEDO, JAPAN
MARCH, 1876.
SERVANT BOY'S ROOM
KITCHEN
DOOR YARD
SMALL YARD
PORCH
VERANDA
DINING ROOM
HALL
STUDY
PARLOR
GUEST ROOM
PRIEST'S DWELLING
TEMPLE
VERANDA
SMALL DISUSED CEMETERY
GARDEN
POND
POND
PRIEST'S KITCHEN GARDEN

MAIN STREET
SMALL YARD
VERANDA
PARLOR
STUDY
VERANDA
GARDEN
POND
POND



Yuba, 1st April, 1876.

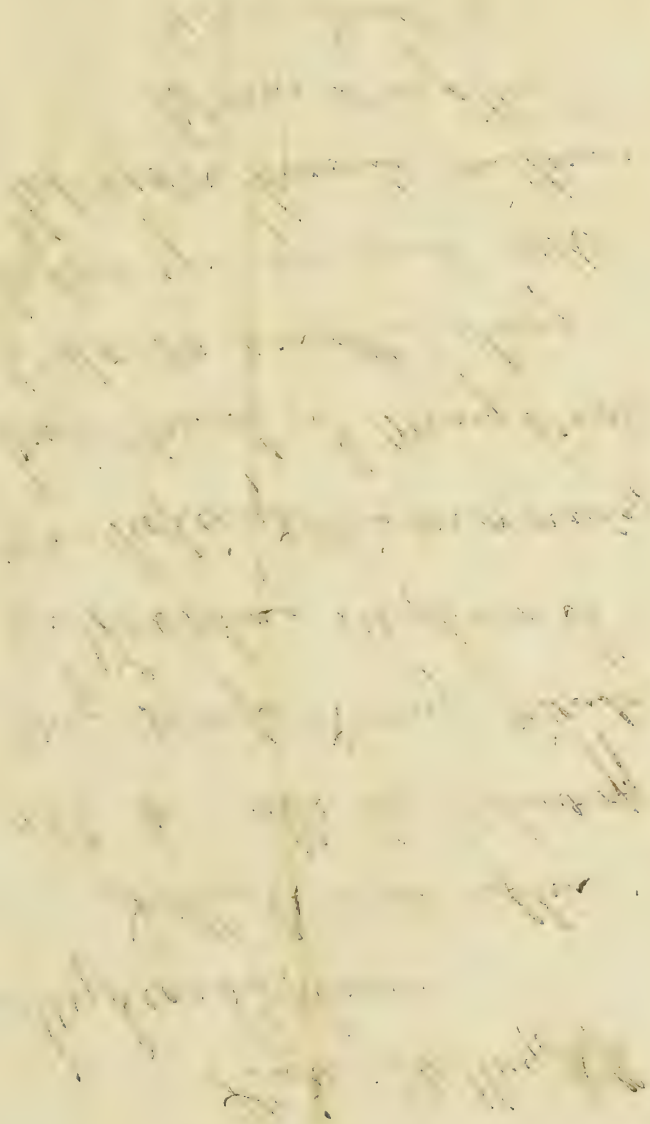
Dear Sir Dan;

Do you happen to know anything about the "speaker saddle pony" of M. W. Bell Davis, No. 10 Tenri Bei Machi, Tenjin, Azabu, that is advertised for sale by auction [illegible] morning? If you could buy this or any other native pacing horse for me I would [illegible] for your trouble. Please write me what would be the [illegible] I would be willing to pay.

Fort Benton, Idaho, 1st May, 1875.

Dear

I have to thank you for the receipt of your
favour of the 17th ult. and the sight draft for £
which I received with much pleasure. We
left and we came from here about 4 days since
the night of the 27th, so no letter was written, and
this is the first moment I have had to write, for the
time has perhaps already gone, and at any rate there
are four months in which I could [illegible]
[illegible] we have been driven about
[illegible] to [illegible] for a few weeks past. We were
allowed to stay here until the first of this month before
we could [illegible] we could stay no longer even if the
[illegible] were [illegible] we were [illegible] and
[illegible] and calculations [illegible] in the different
[illegible] besides the [illegible] which might [illegible] the
[illegible] work. At length by the end of [illegible] we
[illegible] the results of the measurements in a
number of tons of coal, and so convinced the
[illegible] of the very great importance of our work that
they were willing to let us give our own time for the
finishing of the new survey, and that is probably by
the 20th of the month, after which they will call
for reports & the whole work [illegible] before we go into
the field. We calculate [illegible]
Sunday, and I spend the week [illegible]
the Coal Survey, in the Belt Creek Valley [illegible]
[illegible] would amount in the [illegible]
[illegible] coal measures that [illegible]
[illegible] to [illegible] 3000 tons and [illegible]



unexpected and seeming likely to be of great national importance. The comparative precision and at the same time probability of the statement as based on our maps vindicates the application of the topographical method of geological surveying in [illegible] degrees as [illegible]. The quantity of coal is [illegible] carefully measured in each of the several surveys, and [illegible] by the whole number of [illegible] of [illegible] [illegible] height what seems [illegible] [illegible] [illegible] [illegible] [illegible] thickness of the coal [illegible], are very [illegible] some of the [illegible] [illegible] [illegible] and [illegible] [illegible] were determined without any reference whatever [illegible] results on the [illegible] [illegible] [illegible] [illegible] [illegible] averaged [illegible] and so is not count[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of the coal of surveys; so that the average there seems to be an exaggerated one by any means. The area [illegible] productive coal fields is perhaps not very exactly [illegible] but seems as likely to be [illegible] [illegible] [illegible]. By any other method [illegible] [illegible] so precise [illegible] (with equal probability) of the [illegible] of coal on the islands could have been [illegible] [illegible] of diligent labor. I am going to send you also a report [illegible] [illegible] together, a part of [illegible] pamphlet [illegible] [illegible]. The [illegible] printer has however [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] more reports on special surveys [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

[illegible] careful [illegible] hundred yards [illegible] [illegible] [illegible] five days ago [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] gradually less and less from a [illegible] pain [illegible] of my backbone which I conjecture to be the place [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] cause pain there, [illegible] [illegible] full of small [illegible] [illegible] [illegible] [illegible] [illegible] is probably a much worse case. [illegible] [illegible] [illegible] [illegible] in general my assistants [illegible] [illegible] [illegible] here. They, by [illegible], have got [illegible] [illegible] [illegible] their great delight are transferred permanently [illegible] [illegible] [illegible] from the position of students [illegible]

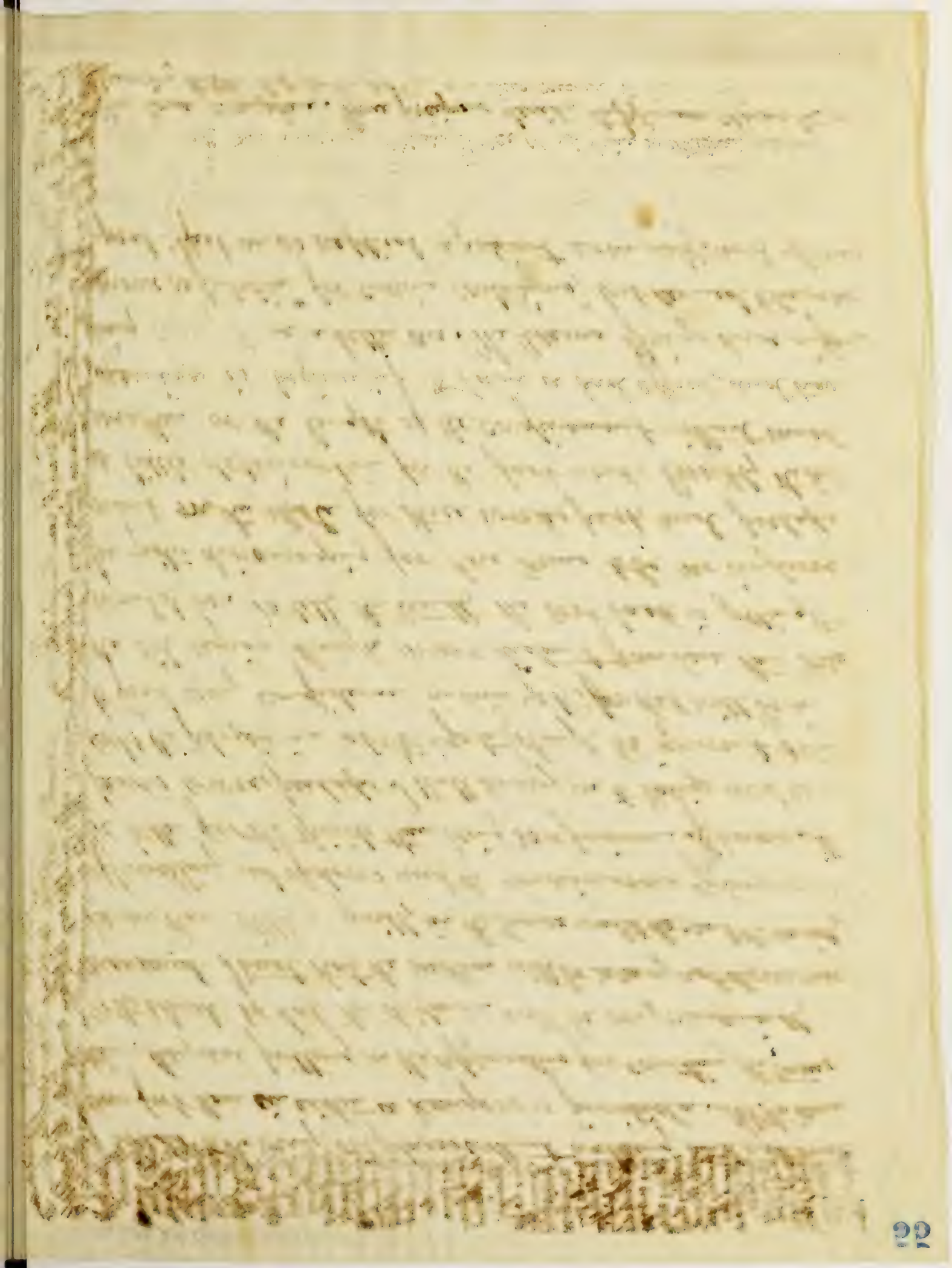
must now be raised, that of hired men or perhaps an
[illegible] when I was expecting to have at once to leave
home my little collection of animals, and I was fortunate
in case they could [illegible] for the pursuit of
[illegible]. They were much pleased with the [illegible] and
(called in the Telegraph Journal for Chichester Weekly)
it out in the West Indies holidays. We [illegible] of course what
[illegible] on that of some of your favorite ones but I was sorry
[illegible] a man must always have [illegible] in the
way of distinguishing himself in science by publishing or being
[illegible] the idea that he members may expend
it to some thing for their [illegible] and possibly benefit
the world. We are however careful enough of [illegible]
being from membership those who have only an object
[illegible] in the matter, and by keeping up the [illegible]
[illegible] we hope to secure a [illegible] class of
[illegible] who feel interested in the [illegible] and
advancement of Selborne, or who think it [illegible] their
[illegible] to pay a small sum annually for the
[illegible] of working. We have for some
[illegible] been in correspondence with Mr [illegible] of
Liverpool who [illegible] several weeks for 10 hours daily, [illegible] work of the
[illegible] kind that I have not [illegible] and which
[illegible] affairs; but hope that he will be a member
[illegible] Selborne. Its members [illegible] local
[illegible] of gathering together [illegible] and [illegible] information
[illegible] minerals and [illegible] Of course we are
beginning a library as well as collecting; and this is the
occasion of this [illegible]; for I wish to get the
very suitable recipient of the reports of your surveys
[illegible] are to be issued [illegible] publishing [illegible]
will publishing that you can [illegible]. The young
men are very excellent fellows and are work a hope
[illegible] in my opinion and they will be delighted
[illegible] I see them that you were visiting you could "run over"
see our work and them.

You surprise me much by speaking [illegible] and I
[illegible] pleasure the [illegible] of visiting [illegible] kept [illegible]
[illegible] that had been advertised with [illegible] but [illegible]
[illegible] I [illegible] to [illegible]. I hope
Please give my [illegible] and believe me always
Very [illegible] yours [illegible]

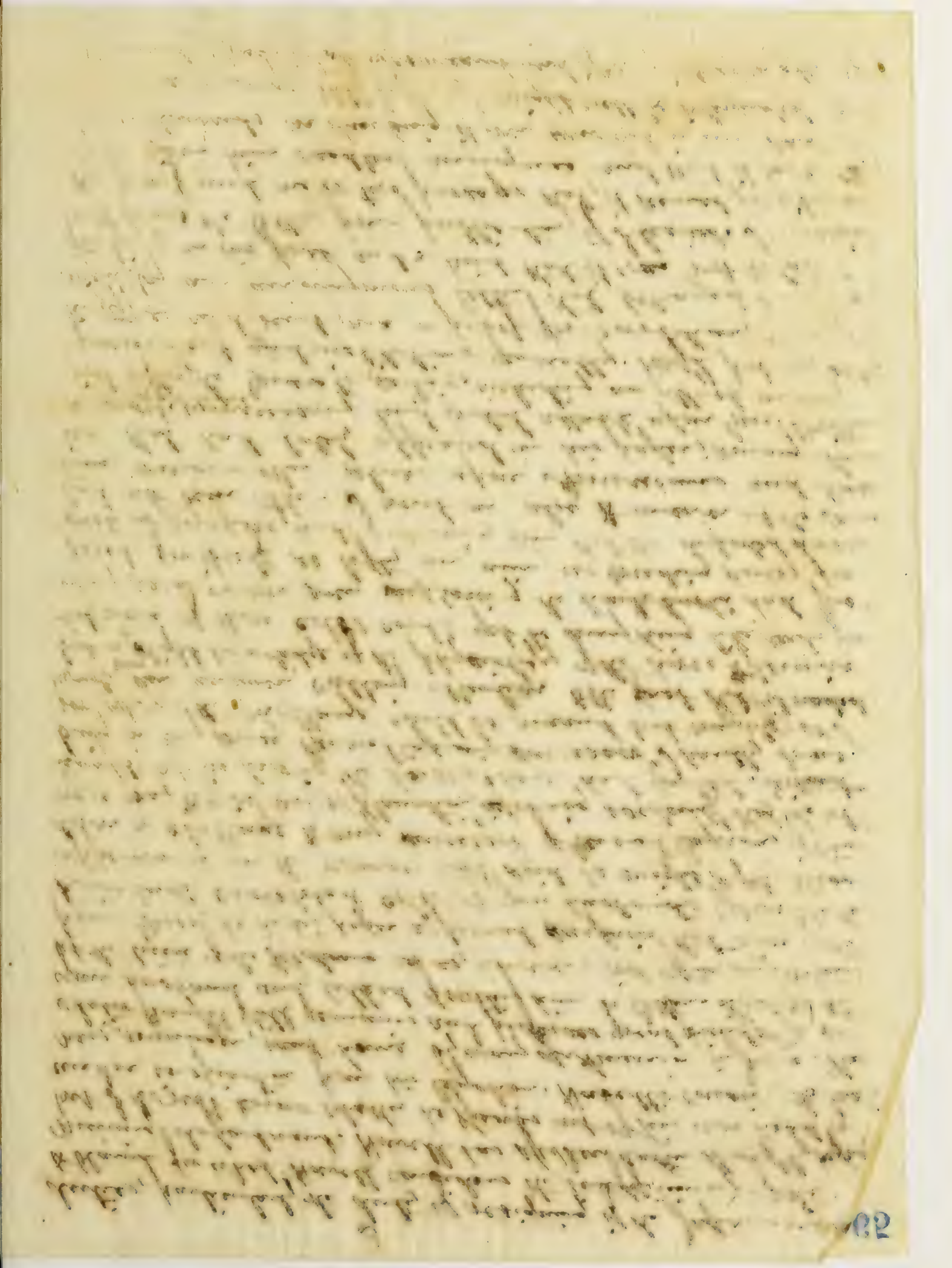
22 June 1871

My Dear Friend:

of my intention to stay in Spain, and their expecta-
tions to this are was the reason of my leaving and
have been for so long a time.



with a "cold collation" ample enough for a small army, and with a fine concert by the two rival bands corps, and with a fine concert by the two rival bands of the military and marine, of French and of English instruments; but in the midst of it was taken off to look at the figure [illegible] opened the last few tombs which have been [illegible] years and where we were admitted to the beautiful, [illegible] walked [illegible] with [illegible] [illegible] [illegible] [illegible] [illegible] but [illegible] [illegible] and the [illegible] of the priests. But [illegible] [illegible] and the [illegible] All the gathering were a few Americans and a few of [illegible] nationality, mostly friends of the Captains. Mr. Bingham and his [illegible] [illegible] [illegible] [illegible] Mr. Wasson, and of [illegible] very positively declared that the [illegible] [illegible] were going [illegible] to be [illegible], but I think it is true, though [illegible] [illegible] [illegible] [illegible] Mr. Wasson's [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] very good [illegible] [illegible] [illegible] all [illegible] I [illegible] [illegible] [illegible] [illegible] [illegible] Mr. Bingham went to Kioto about the 5th of June and was absent [illegible] the time of the Fourth of July celebration in Yedo [illegible] [illegible] [illegible] [illegible] Americans, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I am myself a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] should have [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] that he should have [illegible] so [illegible] [illegible] [illegible] [illegible] at the Centennial [illegible]; for he may not be [illegible] [illegible] at the next Centennial — nor [illegible] [illegible] [illegible] [illegible] [illegible]. He seems to be a good-hearted man. His wife, too, always [illegible] a very excellent woman, but I have not seen her since [illegible] [illegible] Japan, though going occasionally [illegible] [illegible]. Indeed, from being in [illegible] all the [illegible] almost confined to the house through the winter and [illegible] I have seen [illegible] [illegible] except a very few who [illegible] [illegible] enough to look me up. Among the latter was [illegible] [illegible] very old friend and a very [illegible] [illegible] [illegible] [illegible] [illegible] Wasson [illegible] had [illegible] [illegible] [illegible] [illegible] last autumn; but he has [illegible] [illegible] [illegible] [illegible] female relatives that I did not [illegible] [illegible] [illegible] months. He is especially fond of his [illegible] [illegible] large boy. I see [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]



67

Ithaca, 18th Feb. 1876.

D. Gamble Esq.

Kirkwall,

My dear Sir,

I find that by mistake I [illegible] the Census Report [illegible] Census Office [illegible] enclosing the Tables. The report should [illegible] Tables [illegible] forthwith. I will make the corrections.

[illegible]

Feb 11 76.

Berlin, 8 Sept 1876.

Takada, Echigo, 28 Feb. 1876.

My dear Mr. Williams:

I owe you many thanks

Aleks. Lutkevitsch Septem. 1876

35

611

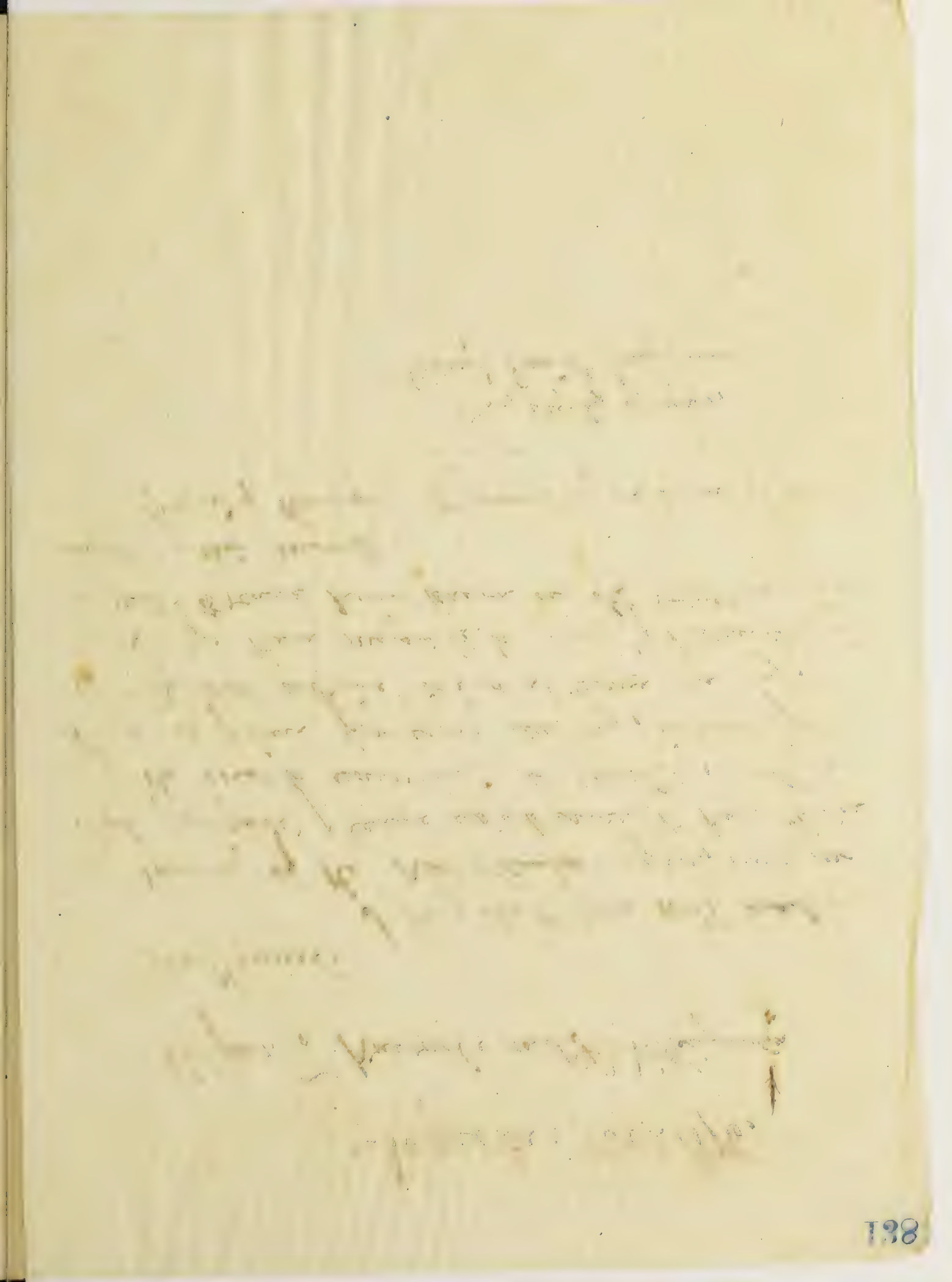
5

Spinnaun, Sept 1876.

127

[illegible] rather cool. But even with 90° I [illegible] splitting the weather [illegible] not suffered; it would pass over soon for [illegible] both first I was ignorant but the same that the sun was anything unusual here, as [illegible] just what I had imagined you) in [illegible] land, Mr. F. Lamont, however, was one day overcome by the heat while surveying; but in a day or two recovered in [illegible] again.

But I forget that you do not know [illegible] of my leaving [illegible]. We were allowed to stay there from March to [illegible] and [illegible] until the beginning of June. I had [illegible] in [illegible] across, in the height of [illegible] and [illegible] a week later [illegible] started [illegible] of the most important maps, and the [illegible] [illegible] geological map of [illegible] in colour [illegible] completed, and before the assistants finished all the maps were done. I had the maps [illegible] framed (two of them [illegible] [illegible]) and [illegible] my friends to come and look at them and dine with me afterwards [illegible] Japanese officials, and a [illegible] some dozen or more [illegible]. That was only three or four days before my [illegible] [illegible]



N
N

[illegible]

Messrs [illegible] & [illegible]:

President [illegible]

Gentlemen:

I enclose herewith a [illegible] rough sketch map [illegible] [illegible] giving the [illegible] [illegible] to be [illegible] to be located [illegible] on the south east side of [illegible] which [illegible] southward to [illegible] You will please [illegible] with the transit, if you have one; with the prismatic compass, if you have not a transit) a line from [illegible] to the [illegible]; taking for that purpose [illegible] [illegible] followed, to any [illegible] that you may [illegible] If there be time enough after that, you may run lines [illegible] with the prismatic compass and hand level across that main line from north east to south west, making the lines [illegible] (as in the [illegible] region). But I think you will not have time for such work; and, if not, you may simply make a [illegible] [illegible] of each place [illegible] running the main line to connect all the places). At [illegible] the square might [illegible] feet on each side, [illegible] [illegible]

at Tea my Love; At Kamakura my Love
I have marked some steps in the margin, that you will
know what I mean, as I shall know my steps
indeed by yours, and probably marked them in
the same way.

Hoping you will understand these directions, I
beg I remain,

Your Own

(Very true, yours
Beg[illegible]

Augusta, 26 Oct. 1876.

M. Mackintosh Esq,

Kewaunee Co. Kansas

Dear Sir,

I owe you many thanks for your kind favor received today, and assure you it will be intended as a sign of your esteem, and as a token of your kindness to me, and as you desire I shall write you a letter, and tell you all I know about the Indians, and their habits, and manners, and customs, and how they live, and what they do, and how they get their living, and what they eat, and what they wear, and what they drink, and what they smoke, and what they chew, and what they spit, and what they say, and what they think, and what they believe, and what they worship, and what they fear, and what they hope for, and what they love, and what they hate, and what they are afraid of, and what they are not afraid of, and what they are ashamed of, and what they are not ashamed of, and what they are proud of, and what they are not proud of, and what they are glad of, and what they are not glad of, and what they are sorry for, and what they are not sorry for, and what they are angry at, and what they are not angry at, and what they are pleased with, and what they are not pleased with, and what they are satisfied with, and what they are not satisfied with, and what they are disappointed in, and what they are not disappointed in, and what they are surprised at, and what they are not surprised at, and what they are astonished at, and what they are not astonished at, and what they are amazed at, and what they are not amazed at, and what they are confounded at, and what they are not confounded at, and what they are perplexed at, and what they are not perplexed at, and what they are puzzled at, and what they are not puzzled at, and what they are bewildered at, and what they are not bewildered at, and what they are confused at, and what they are not confused at, and what they are embarrassed at, and what they are not embarrassed at, and what they are ashamed of, and what they are not ashamed of, and what they are proud of, and what they are not proud of, and what they are glad of, and what they are not glad of, and what they are sorry for, and what they are not sorry for, and what they are angry at, and what they are not angry at, and what they are pleased with, and what they are not pleased with, and what they are satisfied with, and what they are not satisfied with, and what they are disappointed in, and what they are not disappointed in, and what they are surprised at, and what they are not surprised at, and what they are astonished at, and what they are not astonished at, and what they are amazed at, and what they are not amazed at, and what they are confounded at, and what they are not confounded at, and what they are perplexed at, and what they are not perplexed at, and what they are puzzled at, and what they are not puzzled at, and what they are bewildered at, and what they are not bewildered at, and what they are confused at, and what they are not confused at, and what they are embarrassed at, and what they are not embarrassed at,

Augsburg, 24 Oct. 1875.

Lieut. Col. Sir Henry Rawlinson,
Commanding Engineer,
Chief of the General Staff,
Horse Guards,
London.

Sir,

I have the honor to acknowledge the receipt of your letter of the 14th inst. and to inform you that I have duly received the Queen's Commission appointing me Consul at Augsburg, and that I have entered upon the duties of my office.

I have the honor to be,
Sir,
Your most obedient servant,

165

Augusta, 27 Feb 1870.

Nauvoo, 29th Oct. 1846.

My Dear Mr. Emmett,

T83

184

Toronto, Ohiba, 10th Nov. 1876.

and U. S. Consul.

My dear General.

From what I heard yesterday at Dr. Punkeman's, one of you is endeavoring his best letter to have me ... for I never received them ... you will let me know where I should send, perhaps at Yokohama ... will write them and have ... Tokio ... I think you ... Consulate & Mr. Pelletier would ... letting the Consul know at once.

I cannot thank you too much ... very kind offer ... I never received ... but I will never ... day after seeing Dr. Punkeman.

Meanwhile, I am,

My dear General
Very truly yours,
Benj. Smith Lyon

Smyrna, Turkey, 10th Jan. 1876.

Prof. K. P. Stevens,

Dear Professor:

I was very glad to receive
your kind letter of yesterday, as it
was a little sad and perhaps
some hot springs would be the best medicine
and most obliging thing for you.

Dr. Van Lennep has visited me this morning
and has confirmed the opinion Salmon gave
yesterday, that a visit to the springs would not
be necessary, but insists that I must rest from
work for a while, and in order to do so better
would make him a visit of several weeks.
He has invited me so cordially to do so, that I
am really going this afternoon to his house
to stay a few days, not so long by any
means as he suggests, for in my opinion he
will overrate the need of careful rest that
I require, return however I should be very
glad to do a little less work than is commonly needful.

Yours truly, Very truly, Rev. Dwight

Jamaica Shiloh, 10th Mo 1876.

My dear Friend C.

Many thanks for
your letter of yesterday and
enclosure of Dr. Parker's
letter. I am sufficiently
[illegible] to
do [illegible]
as there is no particular
[illegible] to [illegible]
me about it.

I have sold now
[illegible] shares [illegible]
[illegible]

question about its arrange-
ment; and I can do so
whenever you find it con-

Meyer Isaac

Very truly yours,

Ezekiel Isaac Cohen

[illegible], [illegible], Shiba; [illegible] 186[illegible]

My dear Mr. [illegible]:

I have to thank you so much indeed for your [illegible] very kind letter received [illegible] the [illegible], and [illegible] after my arrival here. And [illegible] again [illegible] here last night from a visit [illegible] I find the beautiful [illegible] that you [illegible] so kindly sent me. [illegible] [illegible] [illegible] it; [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] and [illegible] the [illegible] myself.

I am glad to hear that you are [illegible] better in health, and hope that the [illegible] weather will not delay your recovery. [illegible] have indeed had a long [illegible] [illegible]. I was hoping to be able to visit you [illegible] but Mr. [illegible] says it is [illegible] some distance from [illegible] [illegible] [illegible] be able [illegible] [illegible] [illegible] for me. Perhaps you [illegible] [illegible] some time [illegible]

though I expect to get well once more.

I received from Dr. Abernick in my [illegible]
He came from one hundred [illegible]
[illegible]. He came in place of Dr. Hoffman, who
left and to be absent from. Being blind as
I could not [illegible], but I was [illegible]
[illegible] with him. He would do nothing but
make a pass after it that [illegible] and
[illegible] it, and he even sent me [illegible]
[illegible] if it were medicine, but
[illegible] never used. I hope you have a more
[illegible] physician in his place.

I am very much obliged to you for your
[illegible] in looking over the proofs of the
[illegible] that they are lithographing. I have not
[illegible] a good chance to look over them
[illegible] Mr. Hammond bought them a
few days ago. For I have been visiting the
[illegible] Physician Dr. Hankamp and have [illegible]
[illegible] with to do my work, and I can
[illegible] conveniently work to you in acknowledgment of your great [illegible] favors.

Wishing to hear from you before long I am

Very truly yours. Geo. F. Smith Esqr.

Jonesville, Decemr, 18th

B. J. Bruce Esq.

Nr 33 Wakeham.

My Dear Mr. Bruce.

I have arrived home safe last, and left a Mr Wakeham would be much able to do so for us.

Dear Sir I sent home for some money, and felt the liberty of asking to have it by a Bill addressed to me in your care. If you should hear of them please let me know. Also I ordered some from England to be addressed in the same way but they will not come for some time probably.

If I am in your debt owing to you to Mr Tribner & Co. I am with remembrance your Obd & shall be with pleasure, attending to the amount.

I shall in [illegible] in the middle of [illegible] with my kind regards & thanking you for your kindness [illegible] Bruce & Mrs Bruce & [illegible]

Yours &c

Benj. Smith Barton.

Wellington, Saturday, Sketa, Feb, 4 Nov. 67

To the Editor
of the Wanganui Weekly Mail,
No 32 Victoria st.

Sir,

I return you herewith the proof
of Bibi. Ruapekapekanui and Pirongia
report, received through the Kaitaki;
I find 110, 111, 119, 121, 123, 127, 138, 143, 146, 151
and 91; which seem to be correct.

I am now at home again and shall
be in future to send back the proofs
as fully than has been done this time.
Tauranga report you need not bother
about before it calls. When the
Bibi report and the Pirongia report
are published in type and bound; so that parts
will be handy not to distribute the type pages
any at present.

Please send me another proof of the
Bibi now returned, and oblige

Yours very truly

[illegible]

P.S. Your editor makes rather lame excuses in writing about American matters. In the number received last night he alludes to "the previous obscurity of the "respectable" "Presidential" candidate" Mr. Fillmore, the governor of our most populous state for many years a leader of his party & probably the best known and most respected man in it. Perhaps it is by a provincial jeu merely that the editor says that Mr. Fillmore has by "three seventhes of the people" been freely held up to the world as a "first rate, intelligent railway wrecker, &c"

D. L. L.

Journal Subscribers Office

My dear Mrs. Benbow:

I owe you a thousand thanks for the nice little macaroni and for your inquiries after my health. I left Rome little ill myself, and have very little enjoyed indeed today. I visit abroad since, so much as going to church. I do doubt you [illegible]

January [illegible] 15 [illegible]

[illegible]

[illegible] dear [illegible]

Enclosed [illegible]

[illegible] power of attorney, which you
[illegible] to buy Lot, I will try to
[illegible] at my future offer
[illegible] half [illegible] terms.

[illegible] to Bank you
[illegible]

Jerusalem, Salem, 15 Nov. 1875

Dear Mr. Yarmouth:

I return you herewith the
proofs of the [illegible] and Okeani
Bailey maps. The latter is almost perfect
as it is; but the two ends of railroad [illegible]
is not quite right and [illegible]
Ed Hamm [illegible] Hamm is the original of the

[illegible] you will [illegible]
[illegible]. He also gives several
[illegible] corrections & additions in the
[illegible], which appear a little surprising yet I have
[illegible] as well as English, [illegible] have adopted
[illegible] in.

Mr. Hamm expected to [illegible]
to thoroughly [illegible] nearly anything and
[illegible].

[illegible] must be very well done and a
[illegible] [illegible] Mrs. Smith [illegible].

[illegible], Mich., 26th Nov. 1876.

Manager,
Saginaw Weekly Mail,
Saginaw.

Dear Sir:

[illegible]

Boston, January 26 1876

Dear Mr. Emmons!

Mr. Ray (Boston
Mail) writes to inquire how many
vols. are to be printed of the 3 Reports on
Japan. If the Publication has changed
its number it does since we sent you
word, be necessary to reprint the type
are printed for. I have not heard
any change so that kind; they
by May 1st & have an im-
mense [illegible] been made.
If you will let me know I will work
them at once as he is expecting them
today. He tells me they pay he will pay
the bill on delivery & Congress copies very quickly.
Yours truly Geo. Smith Emmons

200

Jenin, Thurs., 2 Nov. 16.

Dear Mr. Mojsisovics:

Can you tell me and
[illegible] copies of the reports sent in
[illegible] Kerbedi with those
[illegible] [illegible] written [illegible]

[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

Dear Mr. Noyes:

[illegible] [illegible] [illegible], 20th [illegible]

[illegible] Esq.
Messenger [illegible] [illegible].

Dear Sir:

I find [illegible] in my letter of 15 [illegible] [illegible] I asked for 500 copies [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] myself, I received a few copies of [illegible] [illegible] expect them to be [illegible] with the remainder [illegible] friends & [illegible] them; so that I shall want [illegible] remainder (100) of the report [illegible] [illegible] [illegible] Kaitchen [illegible] [illegible] [illegible] [illegible] [illegible]) they will [illegible] [illegible] [illegible] copies [illegible] [illegible] [illegible] [illegible] [illegible] copies [illegible]

[illegible]

Ottawa, Dominion, Wed., 21 June 1876.

Drummond Hay Esq.
Manager Post Office Mail

Dear Sir:

By your favor of yesterday received this morning it is clear that [illegible] is required of the [illegible] for the [illegible] I have received at one time 20 copies, at another time either 5 or 10 or 12. I have sent most often to friends and shall send to respectful remainder (the reports now in press) to the same friends and they can state to how many to send or not as they choose. The Secretary will do likewise, if it has not [illegible]

January Friday 25 1878.

Dear Mr. Hammond:

Many thanks for your
kind offer, Knowing what Mr. Lowell
[illegible] to [illegible] and that
[illegible] by [illegible] and that you
[illegible] [illegible] will have taken
[illegible] by now. that
[illegible] that you gave her
[illegible] address also I have
[illegible] that it will have
[illegible] here.
[illegible] and finish.
[illegible] I have [illegible]
[illegible] a bird in
[illegible]
[illegible]

[illegible] 26 Nov.

Dear Mum: [illegible]

we go to the Office ([illegible] [illegible] off) [illegible]
work, [illegible] [illegible] [illegible] having been [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] the [illegible]
doubly have a [illegible] [illegible] [illegible] we have [illegible]
[illegible] [illegible] [illegible] [illegible] have
[illegible] [illegible] [illegible] home to the country. [illegible]
[illegible] [illegible] [illegible] of holiday at Newtown's
[illegible] [illegible] will be little work [illegible]
[illegible] [illegible] [illegible] the days [illegible]
[illegible] [illegible]
[illegible] [illegible], a [illegible]
[illegible] [illegible] [illegible]
[illegible] however only due to bad drainage I think. [illegible]
I may take a certain house on high ground [illegible]
[illegible] from [illegible] [illegible] and [illegible] near the [illegible]
[illegible] [illegible] occupied by Mr. [illegible]
[illegible] [illegible] in Batavia, [illegible]
[illegible] Mr. [illegible]
[illegible] [illegible]
[illegible] I [illegible] [illegible] good fellow. [illegible]
[illegible] [illegible] whom he had been [illegible]
[illegible] [illegible] They have only [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] in August and [illegible]
[illegible] getting better. I hate to move, [illegible]
[illegible] [illegible] in the way [illegible] the same
[illegible] [illegible] will be some pleasure in [illegible]
[illegible] [illegible] I should take two more rooms
[illegible] [illegible], would [illegible] [illegible] the whole
[illegible] [illegible] [illegible] [illegible] and [illegible]
[illegible] [illegible] [illegible]

1 [illegible]	[illegible]
1 Bible, book and soap dish	1.50
[illegible]	1.00
[illegible]	1.00
[illegible]	0.50
[illegible]	2.00
2 Small	1.50
Hospital pr. Handbook	0.50
Pencil	3.00
[illegible]	72.00
[illegible]	0.84
[illegible]	2.30
[illegible]	0,500
[illegible]	0,250
[illegible]	0.376
[illegible]	0.313
[illegible]	0.350
[illegible]	0.090
[illegible]	0.460
[illegible]	0.040
[illegible]	0.075
[illegible]	0.050
[illegible]	0.176
[illegible]	0.500

0.045

0.300

0.178

0.250

0.188

0.020

1.20

.5

3.00

1.00

3.00

12.00

9.00

7.50

29.935

84.00

10.00

24.00

6.00

120.00

Skokomish, 29 Nov. 1876.

Genl. R. S. Ord,
Commanding.

My dear General:

In addition to the
offices you first gave, I would suggest
to have authority to purchase for-
thwith also:

Estimated cost.

(Office Stationery.)

1 Letter Press ——— $ 5.50
1 Set of Letter Boxes ——— 1.00
1 Set of Seals for Letters ——— 1.00
1 Copying Book ——— 3.00
1 Book, Quarto Post ——— 1.00
1 Black board ——— 3.00
1 Box of Writing Papers ——— 1.00
1 Rack for blackboard ——— 1.00

(Office Stores.)

6 Gals Oil for Lamps ———

If the Lamps &c above
include the articles for the
Offices here, if you

312

Stockholm, 29 Nov: 1871.

219

shall receive a like award of the approval that the government would be required to bestow upon the best and most meritorious work. The Board feels encouraged in the increase of their salary for the future or the improvement of their position, but concerning that you can probably judge better than I can.

Yours,

My dear General,

Very truly yours,

Capt. Chief Corps of Engineers

[illegible] 30 [illegible]

Genl. [illegible] Ord,

[illegible]

My dear General:

I [illegible] it is the custom for those [illegible] in the [illegible] to write, or [illegible] their name in a register every morning on coming to office. I have no objections whatever to [illegible] registering by my assistants, if [illegible] will be my [illegible].

[illegible] coming to the [illegible]

[illegible] an hour or more [illegible]. I was not aware that [illegible] desire to have my assistants [illegible] the practice, or indeed that there was any registration [illegible] office [illegible]

[illegible] Let there be any [illegible]
question [illegible] a gap of [illegible]
to express kind and [illegible] service
[illegible] of the Shiloh. Of course
it is desirable to have some record
of passage and absence at office,
but I have hitherto kept such
a record for [illegible] and
[illegible] but should not [illegible]
to be relieved of the [illegible]
responsibility.

I am,
My dear General,
Always very truly
Your Faithful Friend.

[illegible]

My dear Mrs. Hemistead.

I [illegible] you in with this
work just [illegible] Philadelphia, and
beg you will get many of your [illegible]
to [illegible] Reading the Boys [illegible] and then
the [illegible]

[illegible]

[illegible]

Yours very truly,
[illegible]

Jeunia, Indn, 3 Dec. 1875.

[illegible]

[illegible] Annual Report received last night [illegible] remunerative [illegible] 27.

Rain is in store for Nellore.

[illegible] expectations in the [illegible] [illegible] the long [illegible] [illegible] cancelled [illegible] by heavy [illegible] during the last month, remunerative [illegible] [illegible] [illegible] [illegible]

224

Yours very truly,

287

Geological Survey of Auckland.

Report of Progress

of the

Kauri Geological Surveys

for 1875, and

Seven Coal Survey Reports,

by

Benjamin Smith Lyon,

Chief Geologist and Mining Engineer.

Auckland:
Published by the Provincial Government,
1876.

Contents.

Report of Lily meeting 1875 — 1

Lily of the Valley

Trillium

Erythronium

Smilacina

Uvularia

Asparagus

Polygonatum

Convallaria

Medeola

Allium

Camassia

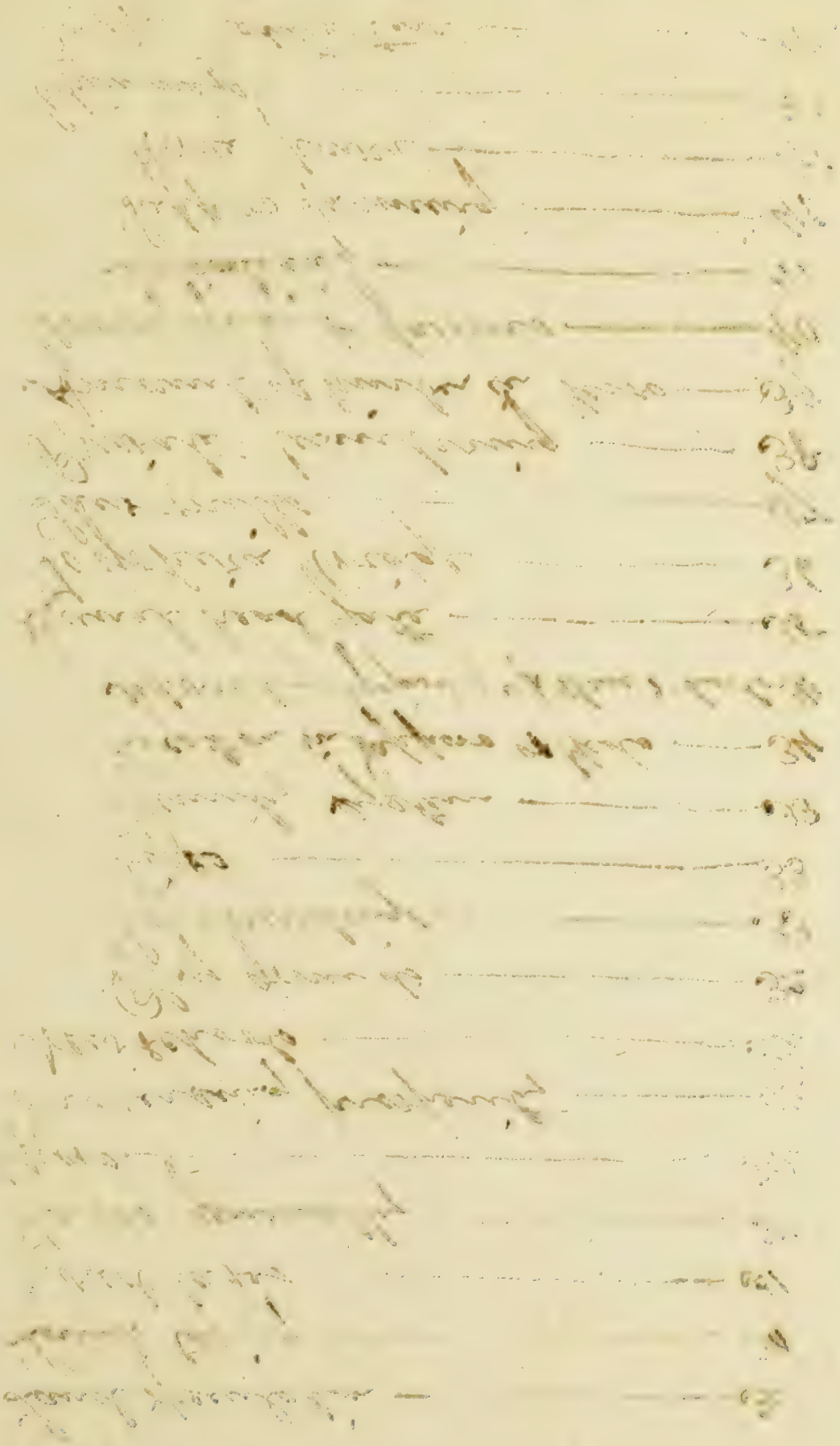
Erythronium

Calochortus

Brodiaea

Bloodgoodia and Milla

Hål 6 ——— 15
Landing hålen Kan så lätt ——— 15
Nora Hålen med Lösbart Hål ——— 16
Hål 6 ——— 17
Hål plan för Hål ——— 17
Hål 6 för gjuta in plan ——— 17
Kvarnhålen för Svarvar ——— 20
Hål med lås ——— 20
Svarvar & Kryssorna ——— 21
Kryssorna Hål ——— 21
Hål ——— 21
Hål med ——— 21
Hål, på hål ——— 22
Hål ——— 22
Kryssorna & Hål ——— 23
Hål ——— 24
Hål ——— 25
Hål ——— 25
Hål ——— 25
Hål & Hål ——— 25
Hål ——— 26
Hål ——— 26
Hål ——— 26
Hål ——— 26



Railroad to Clay ——
Survey from Kan. to Pomeroy
Pomeroy to
Office & coal
Coal
Prospecting coal
Railroad line from Pomeroy
Line to Ohio for survey
Preliminary for survey
Contract
Horses and steam
Cost of carrying coal
Pomeroy and Kanawha
Nine miles
One hundred boy nine
Steel rail per mile
Engineering per mile
Pomeroy & Hocking
Steel rail
Fastenings
Stone ballast
Timber and labor

New Road — 76
Nine sisters — 77
Nine springs — 78
Nakodale & Ck — 79
Remarks — 80
Mokau Sts Coal Field — 81
1. Stratum — 82
2. Clay stone band — 83
3. Coal
Mokau — 84
Coal and ash — 85
4. Coal — 89
Sandstones and mines — 89
Steeps & Anticlinals — 1
Th — w — Coal — 90
5. Clay stone — 91
Sandstone — 92
Section on Mokau Coal Survey — 93
1. Stratum — 94
2. Clay stone band — 95
3. Coal
Coal Seam — 96
Sandstone — 97

Coal ——— 107
Bituminous Coal. ——— 135
Antrim ——— 103
Shale ——— 104
Limestone ——— 24
S. Richmond ——— 105
Lime ——— 105
Detail Coal Survey ——— 104
Antrim ——— 111
Lower ——— 111
Upper ——— 112
Lime ——— 113
Black Slate ——— 116
Devonian ——— 124
Antrim ——— 125
Antrim ——— 126
Antrim ——— 127
Antrim ——— 128
Antrim ——— 129
Antrim ——— 130

Introduction ... 1

4. Coal ... 8

Workable beds ... 10

Outcrops ... 11

Quantity ... 14

5. Limestone ... 17

Lime ... 17

Limestone quarry ... 19

Limestone and Clay ... 20

Pottery ... 21

Brick ... 21

Common brick ... 22

Fire Clay ... 24

Analyses ... 25

Roads in Section ... 157

4. Coal ... 157

Workable beds ... 157

Outcrops ... 158

Quantity of coal ... 159

Value ... 160

Outcrops ... 161

Quantity ... 162

Limestone ... 163

Lime ... 163

Coal Measures — 165
Pottsville Conglomerate — 169
Lower — 169
Middle — 169
Upper — 169
Lackawanna Coal Measures — 169
1. Basal — 171
2. Mahoning Sandstone — 172
3. Vanport Limestone — 172
Brush Creek — 172
Coal bearing rocks — 172
Ferriferous group — 173
4. Coal — 174
Workable beds — 174
Ames — 174
Allegheny — 175
5. Freeport — 177
6. Kittanning — 178
Conglomerate Coal Field — 181
1. Situation — 183
2. Physical Features — 184
3. Geology — 185
Surface — 185
Coal — 186
Fireclays, Brick Manufacture — 188

Sanaqava №3 ——— 191
Kamba №6 ——— 192
Sakdava №5 ——— 192
Vilava k'ala №1 ——— 192
Kambi 2 ——— 193
Kambi ——— 193
Kdava №1 ——— 193
Kdava №2 ——— 193
Kamba №4 ——— 194
Sakdava 1№ ——— 194
Sakdava №1 ——— 194
Kdava 1№ ——— 195
Jakavadava №1 ——— 195
Kamba №5 ——— 196
Kdavai, Kamavadava №1 ——— 196
Kdava ——— 196
Kamba kdo ——— 196
Kamava Kdavadava ——— 196
Kdavai Kdava ——— 197
Jakdo ——— 196
Kdavai Kdava ———

Mountain already mined ——
Recent mines ——
Future mining ——
5. Mount ——
Minerals ——
Chilkat harbor improvement
Head of Chilkat valley ——
Railroad to Yukon ——
Harbor at Dyea ——
6. Alaska ——
Gold field ——
Hydrographic work

[Documents at the end of the Kenyanema report, after the Signatures, on p. 210]

The [illegible] are of a rough
[illegible] and are situated on the
[illegible] a distance of 15½ feet by 1 foot 3 inches
and is on a stack of [illegible] and is made up of
[illegible] and [illegible] and [illegible]
[illegible] with [illegible] and [illegible]
[illegible] small portion of the land [illegible]
[illegible] the [illegible] of the
[illegible] by another line with [illegible] and also
[illegible] are based upon measurements made from a small boat moved slowly and
[illegible] along a measured line [illegible]
from point to point [illegible]
[illegible] by taking [illegible]
[illegible] and [illegible] and
[illegible] and [illegible] and [illegible]
[illegible] and [illegible] and [illegible]
[illegible] were determined by triangulation
[illegible]. The plane of the [illegible]
[illegible] and [illegible] and [illegible]
[illegible] of the [illegible] and

Penn, Pennsylvania,
14 Dec. 1876.

Prof. M. Yarnall:

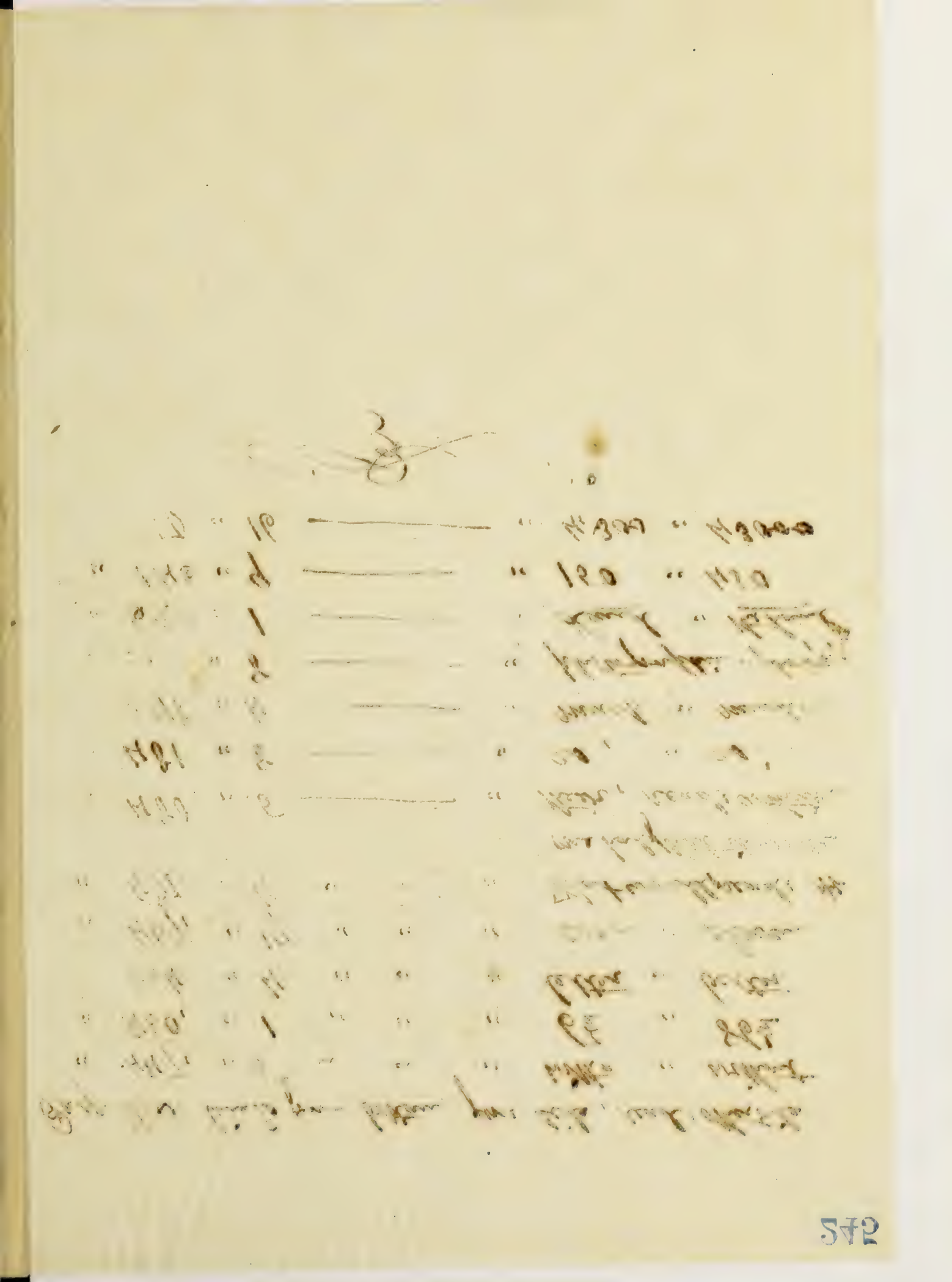
Some of the more important Errata.

Page 5, line 14 from bottom, for are, read; we
" 6, " 14 " " " " b " d,
" 7, " 1 " " " " d " e
" 11, " 11 " " " " Carlisle " Cumberland
" 12, " 6 " " " " Hereford " Herefordshire
" 29, " 3 — " " " b " et
" 31, " 5 from bottom, " Cade " Lancaster
" 32, " 8 " " " " diameter " thickness
" 34, " 6 " " " " Chipstone " Chipstone
" 37, " 8 from bottom " 3,500,000 " 1,600,000
" 40, " 8 " " " " Coal " Coal
" " " " " " " " the Thrapston coal
" " " " " " " " by similar beds
" " " " " " " " a hundred yards
" " " " " " " " in level
" 121, " 15 — — " " Shipmeadow " Shipmeadow

Some of the more important Errata
in the Volume of Memoirs
for 1874.

Page [illegible] line [illegible] from bottom, for [illegible] read [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
"	[illegible]	"	[illegible]	"	[illegible]	"	[illegible]
"	[illegible]	"	1	"	[illegible]	"	[illegible]
	[illegible]	"	[illegible]	"	[illegible]	"	[illegible]
"	[illegible]	"	[illegible]	"	[illegible]	"	[illegible]
"	[illegible]				[illegible]		
	[illegible]	"	[illegible]		[illegible]		
	481	"	[illegible]		[illegible]		
	[illegible]	"	[illegible]		[illegible]		
	[illegible]		[illegible]		[illegible]		
	[illegible]		1		[illegible]		
"	[illegible]	"	[illegible]		150	"	450
	[illegible]		16		4,300	"	43000



Shiba, Nov. 6/76.

Salem, 14 Dec. 1876.

Gen'l K. P. Otis.

My dear General:

I send you herewith a copy
of my publication & Mathematics & Observations
and a copy of "Forms", which came from the
Meteorological Office of the Government at Washington.
During my absence in the Country, I
hope you will forward it through the Chairman
of the Meteorological Office of the Chicago
Exhibition. I remember right, asked me to send
this, in a letter last Spring, though I can
find no memorandum of the fact.

Yours very truly,

Benj. Peirce Cranch.

Chicago, 6th Dec. 1876.

Norman Hay Esq.
Assistant Cashier.

Dear Sir,

Page 109, 113, 111 just taken
are all right and you may go on
the printing at once.

Please send me [illegible] copy of my
copy to Credit and 8 No 17 for
Chrome, Moraine Co's Rifle Pits,
Leads, and also Journey Ticket.

Yours Truly
Geo. Smith Esquire.

No 17 Horikawa-dori (Gokomachi), Kyōbashi, Tokyo
1st March 87.

My dear Mr. Morse,

On counting up again, I find that I may need more of that money than I thought yesterday, so please do not lend any to Nishima at present, if you have not already done so.

Trying to save to pleasure myself by coming over in Yedo, although until my house repairs are finished at least I must not spend money in the way I should like, I am.

Yours truly,
Edward S. Morse

251

To the Right Worshipful [illegible]

3

It is perhaps not to be wondered at that the
British Traders at Japan have a notion of
which [illegible] calling the Chiefs
[illegible] "Kings" for perhaps
such persons [illegible] for the Chief Minister
[illegible] would be with the Lord Imagine
that [illegible] the Governing Chief [illegible]
[illegible] Now Prince is a translation
[illegible], saying that the word belongs only
to members of a royal family (like the Ger-
man King) & to that Royal family [illegible]
the Prince Diamond belongs, & the Prince of Satsuma
& the Prince of Nagato, and here is the Ger-
man Word [illegible] the translated Emperor, &
I think the Word is not a King; and that
[illegible] better [illegible]

[illegible]

Lieut K. P. Ott,

Kearney Jct

Asst Adjt General

In compliance with request
contained in your favor of the 18th inst.
I have selected among the books left
[illegible] books
[illegible] forms books, and
[illegible] with postage & revenue stamps
[illegible] which I send by express.
[illegible] obtained in a supply
[illegible] Upon [illegible] I require for
[illegible] and I judge [illegible]
[illegible] all different books,
[illegible] blanks, [illegible]
[illegible] I send the following books
[illegible]

[illegible]

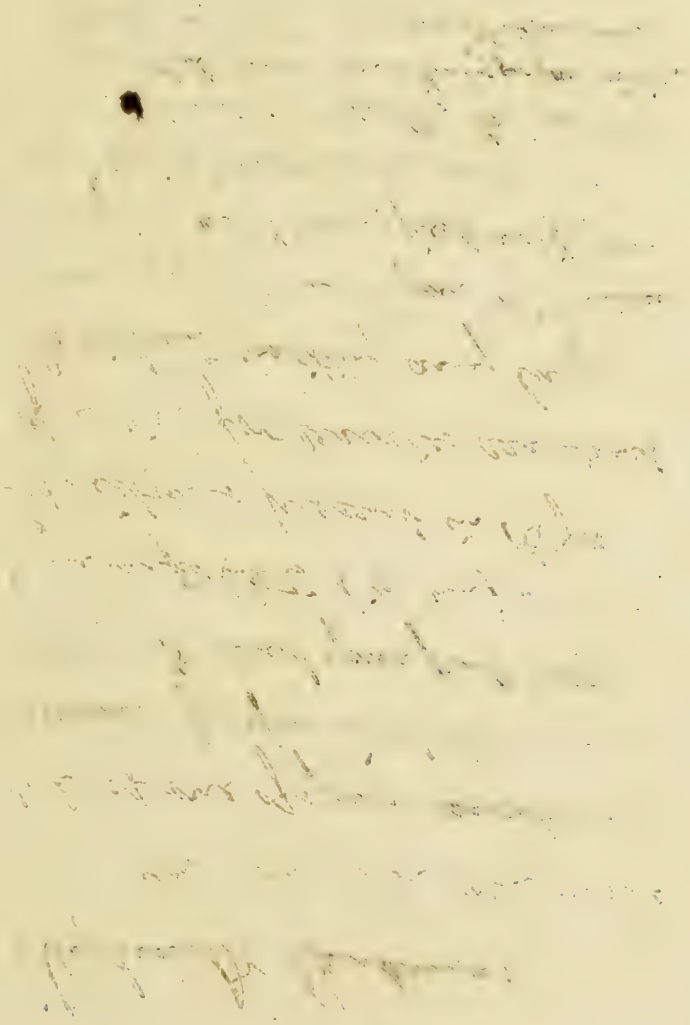
[illegible] ——— Ser
[illegible] ——— Vol
[illegible] ———
[illegible] ———

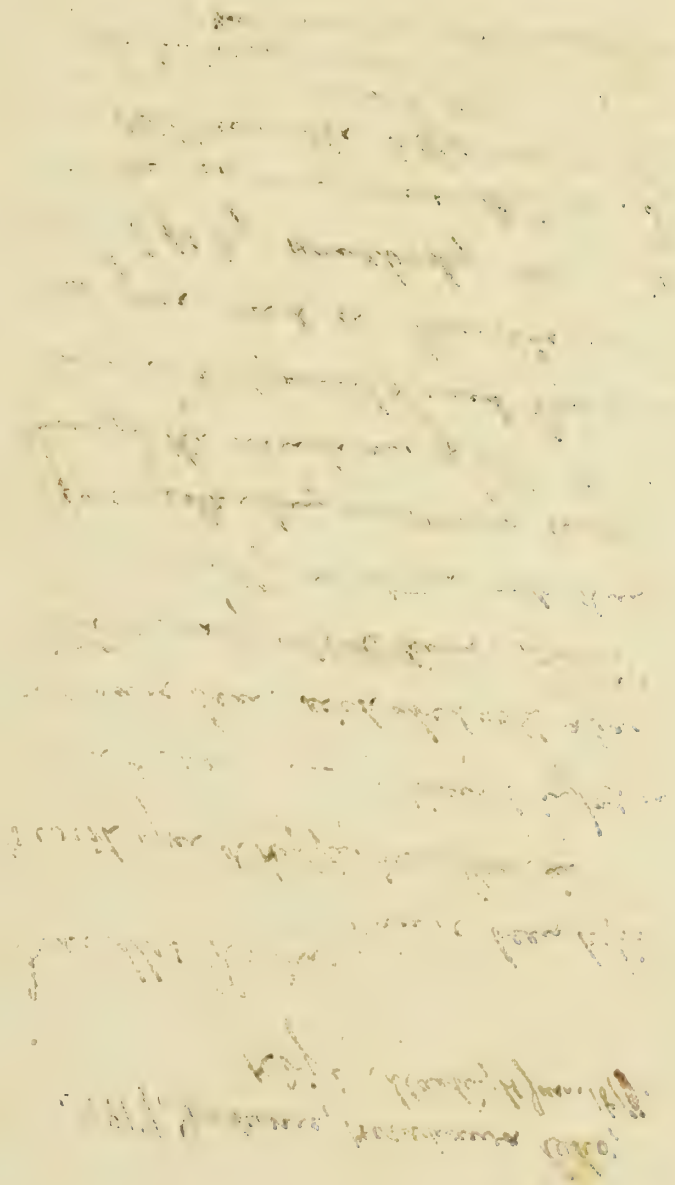
262

[illegible]
[illegible] Dec. 1876.

My dear Dr. Bentham:

[illegible]





268

Yeddo; 8 Jan. 1877.

J. Drummond Hay Esq.

Manager Japan Mail.

Dear Sir:

Many thanks for your favor of the 4th and the copy of the reports stitched together. You can go on with the stitching, if you please. The outside paper I suppose was not intended as a sample, but that the ordinary quality and appearance will be given. I do not care to have anything special in regard to the "author's compliments" printed on the cover of my extra copies.

In glancing through the pamphlet I noticed already one or two misprints. In the Table of contents 126 is printed instead of 129 (just before 131); and on the last page but one (210) a few lines from the bottom the word "and" is put at the end of the line instead of at the beginning of the same line; but I suppose it is now quite too late to take to correct such errors.

Yours very truly Benj: Smith Lyman.

I have been hoping that if I could ride daily [illegible] with such agreeable exercise, getting also [illegible] able, to [illegible] in my legs as to be able again. [illegible] this exercise in riding [illegible] [illegible] [illegible] and [illegible] [illegible] riding again [illegible] [illegible] health much more satisfactory [illegible] on the parallel bars with which I am [illegible] my old skill, although [illegible] [illegible] was at first [illegible]. [illegible] [illegible] again. [illegible] with health good spirits came again [illegible] I was able to join in the Christmas and [illegible] with unusual hilarity. [illegible] [illegible] [illegible] [illegible] nearly two years, though you may not think [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] my young [illegible] [illegible] [illegible] [illegible] sent a note asking [illegible] [illegible] [illegible] that [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] in the [illegible] and [illegible] came in and the [illegible] began [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] was [illegible] [illegible] [illegible] good [illegible] and [illegible] After that we [illegible] [illegible] [illegible] various songs [illegible] [illegible] [illegible] much [illegible] in that [illegible] [illegible] [illegible] [illegible] half [illegible] [illegible] [illegible]

272

Petersburg, 16 Jan 5[illegible]

My dear Dr Parkman:

[illegible]

No. 17. Grahame, Miraflores Villa, Hoji-Ka
18 Jan. 1877.

Dear R. St Clair:

Mr. Takahashi, Minister, Commercial [illegible] Lat. Mr. Iwakura had had [illegible] Mikado with the proposed transfer of Mr. Takahashi to the Kaitakushi and had heard nothing adverse. It is possible, I suppose, that Mr. Iwakura, being the high position may be able to induce the Kaitakushi [illegible] arrangement as plain that would be so [illegible] Mr. Takahashi [illegible] Mikado, opinion [illegible] and to the other parties that Mr. Iwakura may [illegible] unwilling to press very strongly a matter in which he may seem to have so great a personal interest. Nevertheless it would be a very good thing [illegible] to obtain the abandonment of the plan. Mr. Takahashi knowledge and strong opposition of the Mikado to the plan would bring to his assistance.

[illegible] efforts shall fail, however, I have every reason to suppose that Mr Takahashi would be able to [illegible] Kaitakushi and in the end perhaps on the [illegible] [illegible] to be; but I would not have it [illegible] Mr. Takahashi [illegible] Mr. Iwakura [illegible] [illegible] Mr. [illegible]

best a knowledge of the new plan might have been
to procure such a ... of the release as is most
desirable.

My proposal is that, instead of our going
(Mr. Takahashi & the two ...) to Kaitaku
the Kaitakushi has engaged (Mr. Kowada, we shall
send back if Kaw for one year (from Sept-Nov.)
on condition that they have gone, say and ...
& spend next winter in Yedo at work in our
in the study of this (next) Summer's work, under my
guidance and still under the pay of the ...
with some allowance, if you please, for ... expenses
and on condition that all future claims of the Kaitakushi upon the Tokeda shi shall be abandoned.
The understanding moreover to be that the
visits shall be the consulting geologists (and
so far as possible, even the mining engineers) of the
Kaitakushi; and that if there be leisure from the
demands for consultation in regard to mining claims
&c. the two assistants are to be employed with ...
in surveys or researches (more especially, if ...
& the precise limits of the ... will
keep the ... level). If the ... be ...
and it is likely that the ...

[illegible] your hopes.

Of course it is only fair that [illegible] working in the [illegible] solitary mountains of Peru should be [illegible] than in Nippon; and besides the [illegible] the two residents would be greatly benefited, [illegible] they would be more independent, [illegible] independence and importance [illegible] doing would probably make [illegible] & submit under the [illegible] for the temporary [illegible] the Board.

To the other hand the Kaitakushi [illegible] in getting two [illegible] be worth more than twice as much as the [illegible] alone. It would [illegible] suggested by Kuroda as an alternative, [illegible] position [illegible] maturity [illegible]. As they have no claim upon him, [illegible] must be willing & submit & condition in [illegible] him even temporarily, and perhaps would even [illegible] to [illegible] him on such condition and [illegible] allowance; especially considering [illegible] would not be all bad [illegible] [illegible] be considered [illegible] [illegible] by any impartial [illegible]

have the assistance of such young men in [illegible] [illegible]
[illegible] not being yet quite ready for such independent work.
They could nevertheless give much better advice and
explanation of the geological facts discovered by one
[illegible] than any body else in the Kaitakushi
[illegible] [illegible] [illegible] might inspire more con-
[illegible] than even better informed foreigners [illegible]
[illegible] the foreigners might not be as well [illegible]
stood. If any foreigner [illegible] be employed [illegible]
by the Kaitakushi or by private capitalists in mine[s]
in [illegible], these young men would better than any
[illegible] in the Kaitakushi be able to understand and
explain their work and their reports or letters.
[illegible] [illegible] [illegible] able to continue their
studies and mapping here in the winter in the University
[illegible] Kaitakushi as well as their own and without
[illegible] [illegible] to the Kaitakushi. Our other assistants too
would learn something from the [illegible] and [illegible]
[illegible] of these two comrades, as well as [illegible]
from the others. We should all be pleased that [illegible]
one of our number was [illegible] [illegible] off from [illegible]
[illegible] stopped in the progress [illegible] [illegible]
[illegible] [illegible]
[illegible]
[illegible] years many [illegible] [illegible] [illegible] [illegible]

282

[illegible]

My dear Mr. Yamanaka,

I am sorry that [illegible]
is no special urgency in asking you to go
Survey or a geographical survey of the Public Works
Department or the Engineering Department
that I can [illegible] be desirable and
will be able to direct surveys especially important
[illegible] in survey and our kind of geological
[illegible] are made with instruments and the ge-
ological engineering work, such as are necessary
for construction and will be entrusted to a depart-
ment of engineering works in general.
There is no such department and I believe
in England it is in Japan I believe the geological
work is not in a school belonging to
Works Department. There is however in India and
there by the geological survey [illegible]
[illegible] and [illegible] to
Mr. H[illegible]

Hiraham Lake, 21 Jun 1877

Dear Mr. Buchanan

Mr. Buchanan:

[illegible] very much [illegible] have [illegible] very interesting letter of last November that [illegible] me and came, on seeing [illegible] I had been very busy [illegible] I could have resolving the intention also [illegible] and might have replied still [illegible] of you had not left me as good an example I was very much interested indeed in all you told of your life in Jefferson and of what was going on there in general, and wish I could do anything like as well by you in return. But why can't you and Jean both come down here for a visit during the [illegible] season; for there will be a [illegible] get that you can do anything gardening or farming at Jefferson. I can easily engage to give you both accommodation in my house at the same time, and could even provide room for your families, and should be very delighted if you would [illegible]

We could then talk over matters and do
much better than I can do it on paper. You
to meet your cousins & other friends &
would go back to [illegible] in Spring ready for
another year's cheerful work. For the bachelor
life possibly [illegible] seem better & you can [illegible]
up [illegible] should not like to have [illegible]
[illegible] you by any [illegible] that I am in
great [illegible] in [illegible] that the [illegible]
by marriage as I did in Delia. In fact it
was a large house and place, abundance
ground and a with [illegible] acres of [illegible]
old Palladian style with a [illegible]
has always [illegible] for thirty years and is
magnificent, with a [illegible] house though not
quite magnificent with sandstone wood
fittings, and has besides a nursery along
it built for the master with bath and bath
for a small dwelling [illegible] in which two
[illegible] assistants have resided & live. The [illegible]
situation of the place will be after all pretty
[illegible] tithes wise for every servant has
his family, now that I have made my boy
[illegible] he was married, which I had by
[illegible] his allowance wise &c. All told,

Hashibeoni, and 200 tons would be like gray sulphur of Kokui.

Wayland

No. 17. Yokohama, Hirakawa Cho, Koji Dai.
25 Jan. 87.

Although my [illegible] Speech on the
February last, yet there [illegible]
to the Postmaster & the general [illegible]
[illegible] of the mail
[illegible] of the Special Agents [illegible]
do) has for four months [illegible]
[illegible] and [illegible]
it more immediately [illegible] the Post
Department but the [illegible]
to me. But the Post Department
[illegible] in the additional [illegible]
the last year [illegible] of those [illegible]
[illegible] in finishing the [illegible]
[illegible] but there [illegible]
[illegible] of the Post Office
and aid in the [illegible] of Europe. The [illegible]
was made on the 25th [illegible] They were
[illegible] to continue their [illegible] practice
[illegible] the mail [illegible]
[illegible] for the general [illegible]
on the 5th of June.

Meantime there were many [illegible]
[illegible]

again; and on the 21st of June a letter from the official named by the Lieutenant-Governor, Mr. Dobrski was transferred to the [illegible] by family [illegible] and [illegible] was [illegible] formally, on the 27th of June. The whole time we [illegible] the [illegible] Mackay, and the [illegible] Lieutenant-Governor, the payment [illegible] clerk.

While Mr. Lane was waiting and the negotiations [illegible] Mr. Komaski was [illegible] a long table of [illegible] and Esq. showing the [illegible] in regard to [illegible] he had [illegible] a time [illegible] He also had a copy [illegible] official [illegible] for Mr. Mackay. Under [illegible] Commissioner Dewe, and thought [illegible] personal [illegible] to make [illegible] that [illegible] to have us [illegible] with the [illegible] Esq. [illegible]

also provided with maps which make
out again and with a copy of Edwards's large
printed map of Lehigh in my pocket for
the use of [illegible] and
has manuscript [illegible] of the
[illegible] with
[illegible] and
[illegible] and
[illegible] by the great
[illegible] and
[illegible] for
[illegible]

[illegible] of
[illegible] and
[illegible] and
[illegible] of the remainder
[illegible]
[illegible] Remain
[illegible] the
[illegible] and
[illegible] with the two
[illegible] and
[illegible] of
[illegible] by
[illegible] and
[illegible] Minnie
[illegible] from
[illegible] by
[illegible] and
[illegible] and
[illegible] and
[illegible] of the

road, about two leagues & the right of [illegible]

for I had obtained [illegible] leaving [illegible]
& visit points of geological interest near my
route, and considered it highly important
to do so in accordance with the leading aim
of surveys such as the present, viz. the
government. It is very desirable for our purposes
surveys that we shall know as thoroughly as
possible the geology of the oil regions, so
that we may be better enabled to track
formations in which the oil occurs and their
geographical limits. It is not at all impossible
still that the rocks below that contain oil may
be found (perhaps at some depth below the sea
level) at quite a distance from the present oil
wells; and it is therefore important to visit as
nearly the immediate neighborhood of these
but some of the outlying portions of the region
in order to determine, as nearly as may be, the
limits of the oil bearing formation. The hot
springs we have found in very many cases to issue
(like the hot springs of Texas) from volcanic
rocks or from alluvium [illegible]
rocks, and [illegible]

From the Beaver Springs I went the [illegible]
steam to the Warm Hot Springs and the
Kalorama Hot Springs and Rock Lodge
and the night found me as late as the
fourth of June encamping on the land
near a Hot Springs in Kelsey Creek where
formerly was a Indian Town but the
people about 4 or 5 years ago [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
journey.

The plan of the survey work was [illegible]
changed. The [illegible] proposed [illegible]
[illegible] proposed in making small Range [illegible]
with the compass, the levels and [illegible]
at the Hot Springs near Plattsmouth [illegible]
and. The object was to [illegible] and
find Geologists [illegible] at the Platte
Valley Left the 5th to the 12th of June after the
location of the Town maps and notes
[illegible] Mr. Granville came down to
Omaha, and after receiving the Maps [illegible]

the whole map been beyond the reach of
pretend, on a scale of 4 miles to the inch.
however be of great use to the traveller
to, and should be highly effective
Editor of the papers for the
published no map of Japan that is to be compared
and used as an authority. There are three
large maps; but they are to be
in the
very rich. Our map
work of the main roads reduced from
published in 1868, which
was originally drawn
from actual surveys and has
in fact been the only source of
correct information
as they map that does it. Of course
the map however a great deal has been omitted,
in Hokkaido and Ezo we have tried
to fill that deficiency from the best
that could be found; and our calculation
the same for other portions of the
that may be needed. In Yokohama
the Tokaido and

near (30 June) in order that they might be [illegible] to [illegible]. On the 25th we [illegible] set out for [illegible] [illegible] in the [illegible] [illegible], forty five leagues [illegible] and very easy roads. [illegible] the [illegible] exposed along the [illegible] [illegible] [illegible] [illegible] passed [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] to the [illegible] [illegible] [illegible] of the whole [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] knowledge [illegible] [illegible] [illegible]. [illegible] the [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the topography and geology [illegible] [illegible] along, [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] topographical as well as [illegible] [illegible] that are not now to be found [illegible] [illegible]

[illegible] [illegible] [illegible], about [illegible] leagues [illegible] the boundary [illegible] [illegible] [illegible], we had [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] caused by [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

16

of the inhabitants of the ... Such ...
... requirements would ... by ...
... the improvement of ... the ...
... Indians, by ... the ...
... would for small ... here ... Indian
& ... would probably be ... for ...
... of ... with ... were ...
... & ... with ... could be ... in ...
...

... on the 25th of July ... a
... about ... Indians & ... by
... & ... had already ...
... them ... before. On the 27th (Monday) ... of our ..., and ... the ... to ... my plan for the ... of ... Indians, which he ... and by ... of two ... Indian ... to ... finding ... could ... large map ... that ... the ... Lakes

... the head of said ... to ... the ... Canadian ..., and ... coming ... the ... of ...

16

throughout a great part of its extent. Hence we shall probably be able to lay down on the map with a good deal of precision the outcrop of the bed or group of beds that seems to yield all the oil. At present there are wells only at certain points along the outcrop, probably only in the neighborhood of the more conspicuous natural springs. But we shall be able to show where wells can be sunk with advantage along the whole [illegible] [illegible] the oil-bearing bed or group of beds. [illegible] however, the more [illegible] only be [illegible] [illegible] whether that bed or group of beds [illegible] productive [illegible] of the [illegible] [illegible] of the places where they already are found to be productive. It seems very unlikely that the yield of oil will be good throughout the whole length of the outcrop within the [illegible] it appears to be so at very numerous points here and there. [illegible] wells have been sunk and that the absence [illegible] of any yield [illegible] at intermediate points is [illegible] that no oil wells [illegible] been [illegible] there, on account of [illegible]

dd

however not be forgotten that if a suit should
that the title will not be confirmed in the old manner
but a grant should be issued [illegible] that
that these lots may have all been found within
by [illegible] of the very numerous claims which
have been filed in the Surveyor General's Office
before that time and those which
[illegible] the rule, as all records or
memory of such claims in many cases may
[illegible] of many years standing, it will be
[illegible] for new trials & the result.
will be that some of the best of our surveyors
that can be found will make such trials as
[illegible] be discovered in favour of the old or
[illegible] of the productive [illegible] rest, which
[illegible] upon actual survey, we can say
[illegible] Legacy Grants & the [illegible]
[illegible] grants and [illegible] maps and [illegible].

I learned Surveyor does not [illegible]
[illegible] could be to [illegible] should
with the help of our maps, and [illegible]
of certain [illegible] where the [illegible]
of town distance from the [illegible]
of [illegible] there will be [illegible]

22

23

connected by a short branch chain to the cross above the mark; so that when the [illegible] chain was [illegible] the plane of the plate would be at right angles with the line [illegible] the plate vertically so that the [illegible] and [illegible] graduated to give [illegible] and [illegible] so as to be read at a distance could be seen along the [illegible] of the inverted edge of the plate [illegible] on the [illegible] should [illegible] a distance of [illegible] on the [illegible] the two lines [illegible] a distance of fifty feet [illegible] of the length of the chain [illegible] [illegible].

I [illegible] that [illegible] these lines [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] at most of which than [illegible] [illegible] must a probable [illegible] [illegible] thirds that [illegible] of measurements [illegible] [illegible] passing a line a mile long in measuring [illegible] [illegible] a great number of measurements and [illegible] together, and the other [illegible] [illegible]

near Algonquin.

were not very exact, but examined with
and checked by the same carefully
this will probably be very useful in filling
and maps many details which
a village maps give the relative
hills and the forests, besides the roads
streams.

After about five days, when a full
the first part of the
the journey to Kashgar, a compa
from Yarkand, brought the
the high mountain. Close by are the
wells and natural springs, and the
And the Chat Kuwell of Sikigs were
They are supposed by the inhabitants
days several hundred years ago. It
the Japanese history called Kokandshiyaku
(Annals) that rock oil for burning wate
was found in Sekigo in the reign of Jingiko
which was 1150 years ago or about 1100 B.C.
and that was probably at Kuchi [illegible]
[illegible] and the [illegible] were
[illegible]

of common labour, & is likely to be cost
from the increased [illegible] of
the [illegible] and the [illegible]
[illegible] and from the [illegible]
difficulty of getting heavy machinery a
country almost wholly without roads,
would be as great or even greater than in Engl
I even consider that by making use of the [illegible]
making that brings by the [illegible] very
trifling expence to the field I should be gain
by more than the cost of employing an
[illegible] team; and the Plants also the ad
[illegible] procurement of [illegible] manure &
[illegible] employ all the [illegible] proposed in
[illegible] connection with their work, a plan that
[illegible] would, even for [illegible] always be
[illegible]

Nevertheless it is possible that said pro
[illegible] brings it may in certain [illegible]
[illegible] produce [illegible] favourable [illegible]
does not [illegible] may [illegible] difficulty
[illegible] [illegible] [illegible] difficulty [illegible]
[illegible] with [illegible] [illegible]
[illegible] [illegible] [illegible]

C. L.

the use of Steam will be done more cheaply
by Steam Engines and for more general purposes
Steam Engines must be for more general purposes
Steam Engines must be for more general purposes
Steam Engines must be for more general purposes

a very quit possible to place over the well a frame in which a large window sash, with small cheap looking glasses instead of common window panes could move both around & horizontal axis & around the vertical axis of the well. The sun's large mirror could then be so turned as to send the sun's rays directly into the well. Another little cheap mirror at the bottom of the well with the turning frame could be so set as to send the light into any side gallery. Instead of mirrors perhaps a still more convenient & still less dependent on fair weather, though possibly a little dearer, could be got at the bottom of the well from electricity passing through a glass tube containing rarefied air, the two ends of the tube being connected by insulated wire with a small battery at the surface of the ground, or else with a portable battery on the well diggers back. With such light, work could be carried on both night & day & wells could therefore be dug far more rapidly than they are now.

The present mode of working is very simple [illegible] very few men are needed to

for boring with steam. The digging is all done by two men, one of them digs in the morning, from nine o'clock until noon, and the other from noon until three. The one who is at digging work the large blowing machine or bellows is continually sending fresh air to the bottom of the well. The blowing apparatus is nothing but a wooden box about six feet long by three wide and two deep with a board upon [illegible] in it upon a horizontal axis at the middle of each long side of the box and with a vertical division below the board between the two sides of the box. The workman stands upon the board and walks from one end of it to the other alternately pressing down first one end and then the other. Whilst first he is at each end he gives a smart blow with his foot to open or close with the jerk a small valve (C.C. fig. 1) one at each end of the board, a valve that opens inwards with its own weight when the end of the board rises. The air therefore is driven first from one end of the box then from the other into an air pipe, about [illegible] inches, provided at the top of [illegible] and the blowing box

made of boards six lengths, about six feet
and placed on the edge of the well. The
[illegible] lined with large pieces at the corners
and light cross pieces, [illegible] we also use a
ladder for going up and down, though at such
time in addition a rope is tied round the [illegible]
[illegible] and with [illegible]
the mouth of the well. [illegible]
[illegible] by means
[illegible] the [illegible]
[illegible] the [illegible]
the mouth of the well; and [illegible]
by three men, one at each corner of one side
the well and the third on a hole two or three feet
high and a foot and a half wide dug alongside
the well.

[illegible] by a Chinese artist that [illegible]
[illegible] Clark's report [illegible]
you had already given, together with verbal
explanations, a very good idea of [illegible]
Chinese wells now in use, a method that has [illegible]
by gone into the present form in the course
of centuries of experience. Besides [illegible]
mentioned in all [illegible] and [illegible]

variation. The chief improvements that seem to be needed are a better system of lifting the rods and perhaps pumps for both oil and water, a better boring machine and for use in place of [illegible] for water tight casing. Probably the [illegible] [illegible] makers or makers of well casing would have no difficulty [illegible] [illegible] strong [illegible]. Water tight casing of these [illegible] a little more in diameter than could be [illegible] placed [illegible] [illegible] out a great part of the water of the [illegible] to be passed through. With [illegible] [illegible] [illegible] [illegible] make [illegible] have been [illegible] [illegible] up to about 17 (40 gallon) barrels [illegible] [illegible] [illegible] at a very moderate [illegible] (fifteen dollars), so that it would be absurd to build, as was formerly proposed, [illegible] large tanks at an extravagant expense for holding the amount of oil [illegible] any of these wells have yet yielded or any future one is likely to yield.

On Monday [illegible] Aug., I went from [illegible] to Miyoshiji stopping on the way at [illegible] (in [illegible]) to see [illegible] of the [illegible] [illegible] of which [illegible] Koda and [illegible] were [illegible] a [illegible] [illegible] [illegible] [illegible]

91

From 27 Aug. to 5 Sept. I stayed at Miyajima
still spending the mornings in office work and
... with the Geological reports, and in the afternoons
making long excursions with the neighbouring hills, visiting one day the Tagawa oil wells
another day the Sakata oil wells, and once going
across Hiroga to the sea shore in Aki province
near again the same bay. The oil near
Miyajima and along northward to Kabe
occurs near one ... more rock saddles or anticlinals on nearly a straight line, but near
Yu and Odzumozaki on the sea shore the ...
again ... at least the landward
half of another parallel anticline. It is possible
that the oil bearing bed or beds may come near
enough to the surface here to be reached by
deep wells, and our maps and sections will
probably determine that point. It is said
that some gas rises in the sea close by
Odzumozaki, but it may come from a very
depth. The oil company which began to
... at Odzumozaki has ceased and ...
from ... feet deep, and possibly ...
below the present sea level bearing rock ...

highest level of the top of the saddle.

In the Mississippi and Kentucky oil regions there are (besides a great many of smaller yield abandoned wells) about [illegible] wells yielding [illegible] (50 gallons to the barrel) [illegible] an average of about [illegible] a day; each well [illegible] and yielding about [illegible] The best [illegible] wells [illegible] and for [illegible] yielded a daily average of [illegible] after that only about [illegible] on January 1st, 1875, and yielded [illegible] (February 1st, in February, 1875, [illegible] (February 1st, in December, 1874, [illegible] yielding about [illegible] barrel a day, [illegible] [illegible] showing [illegible] to [illegible] that the [illegible] decline [illegible] the [illegible] of the [illegible] of the [illegible] of the [illegible]

Ida

By the beginning of September the harvest in the Kuril Isles and the high hills again commanding abundant clear, bright days had taken [illegible] habit might occupy as in other seasons. But the country was so much [illegible] I had been in Yezo, that we went on much [illegible] steadily having [illegible] straight lines [illegible] roads, but [illegible] advantage that drawing here and there small cuttings in the soft rocks, [illegible] rocks were opened along them the [illegible] such [illegible] to be found in the region. [illegible] manner for more rapid progress was increased experience and skill of the workmen. Such likewise made us [illegible] the [illegible] acquaintance of inhabitants that could [illegible] have [illegible] [illegible] [illegible] [illegible] [illegible]

with the clerk around from Miyagidogi for the Kubikingori oil lands, a day's journey to the south, in order to be able before the coming of the assistants to make a tolerably [illegible] examination of the whole field (as I had ... been able to [illegible]) and consequently ... [illegible] ... had been worked by hand.

We reached Yoita (of Kubikingori) about half-way, the same night, and the next morning still travelling along the road, came to Matsunoshi[illegible] the chief village of the old district (gun) of [illegible]yama [illegible] in there are many oil wells. As far as Yoita and even nearly half way from there to Matsudai, in the neighborhood of the large village Okanomachi, the road was pretty level, the latter part of the way after leaving the low hills around Miyagidogi passing up the [illegible] narrow valley of a small river that [illegible] into the sea near Kubikingori. [illegible] Okanomachi the road became [illegible] ... [illegible] ... village [illegible]

the basin of Matavai.

Even before reaching Point we had fine views of Tooarooa & few leagues, & must at one night could see by the moonlight reputed peaked form with Rocks of equal height on either side that was an old volcano, like part of the nearly all the highest mountains, Pitcairn and Marquesas the surging Ocean [illegible] Chadwick [illegible] Bay of about all the [illegible] a couple of leagues [illegible] but [illegible] was hidden in shadow, but [illegible] moonlight as well as no doubt the bright [illegible] open leagues distant as can be [illegible] and from a single beam shall have what [illegible] eight barrels, or [illegible] beams! Nearly the whole space between the two mountains very hilly, and the hills as the road goes higher and higher towards Matavai Bay [illegible] eventually meeting with volcanic rocks. The height of the hills seems to be due to the presence of the same shaly rock, harder than the clay slate & more incoherent [illegible] we had seen in the Fiji and Kermadec [illegible] Cook [illegible] & the [illegible]

Earthquake oil yield the same shaly rock seemed to form the hills and they were high and filled up the whole region much as was the case in Baluchistan and Kandahar. At Tochinshan near Dawa Khan [illegible] the ground through a space of one or two [illegible] suddenly sank [illegible] feet for about twelve years [illegible] ally on account of an earthquake. The place is in the village in a small valley, [illegible] high hilly ground.

From Mahomed Khan I went the next morning [illegible] to see the two or three oil wells within the limits of that village, at a spot called Kamal Khan, and to which a wagon track on the road we had come and [illegible] to the east returning from there I went on at once to Kamal, about a league westerly from Mahomed Khan, but as my train was unable to go far that day.

The next day, however, [illegible] I was able to pass near and see the [illegible] wells, the three [illegible] Broadcasting [illegible]

4

Ikibaleka on the (Ovi a Mbuli) Kimuniga
wells northwesterly, from Ikoko and Ikoneka
ing to go southerly past the Mbamo unsuccessful
bleak well, the old, abandoned oil wells of Ikoga
mashi, the thirty or more wells of Kinkasi
Vunda, the Nkasama, Mbata-mbaki, Ikoda-ya-
and Kimuni-mya-Kivuka pits or more wells
four places near together, and to reach the Kimuni
ka Kiangu, Ikoka-Lagua and thirty-four more
oil wells, and just within the old volcanic
to the N.E. reach three leagues or so southerly to the
Nkasama River near to the below Ntabamba
and beyond towards the Nkunitoge and Hill
further northward.

The following day (6th Sept.) we went by way
of Ikoda, Ntabagima and Ikoda, past the
wells again and in sight of Kimuni
Nkasama, about four leagues in all northerly
next day (7th Sept.) was still raining;
the afternoon I was able to go and see the
Nkasama natural gas places called Kin-ka-
and Ka-Kiadhi and the other place of the
Ikoda Davis baleka and Ngi (a league
Kimuni, from the Ikoka-Ngi's

was place in the village of Ifoyne was
not at a distance [illegible] from
down the northerly.

On the 10th of September I went to visit the Secretaria [illegible]
of Jamaica to within eight [illegible]
[illegible] of Ogaura and the [illegible]
[illegible] of Ohara and through Kogaro [illegible]
[illegible] Kogaura, about four leagues [illegible]
from Othima, but by the [illegible]
Ohara is full [illegible] leagues
half by very hilly roads, a great [illegible]
horses and one had [illegible]
until after dark, for it is impossible to travel
rapidly in a chair as on horseback.

The next morning (11th) [illegible]
[illegible] wells near Ifoyne at a spot called Kawa
in the Lands of the Kawagami, Ogawa Kobiya
and Tajima villages, and then went in a northwesterly
past a couple of wells, at a point called
Hakusan in the village of Biriyo, and then for
the thirty or more [illegible] wells of Ojidaira, [illegible]
Ogawa and Hiyo, all of which [illegible]
[illegible] wells of Takasu. Ogawa, Kawigawa, Ino [illegible]

exposures but there are about ten scattered
posures of natural gas.

According to information gathered on the spot
before our departure, Digboi is to yield [illegible]
[illegible] Digboi and Kharsang together [illegible]
Sibsagar, and [illegible], also, that the information
[illegible] [illegible] [illegible] [illegible]
will yield regular [illegible] per day
[illegible] a high price for oil [illegible]
with some gas from wells that are [illegible]
small ones, and according as lucky wells are
completed or exhausted. One well a year
ago at Digboi yielded [illegible] barrels per day. Most wells however
yield a very small amount [illegible]
[illegible] per day, and at Kharsang even one pit
is [illegible] proving no doubt that the
wells are [illegible] very close [illegible] the
[illegible] hardly thick, but [illegible]
[illegible] very small yield as the wells [illegible]
and more at first but are still [illegible]
working though the [illegible] a little.

parallel to the northeasterly and southwesterly [illegible]
section of the saddle and basin.

At Takuda we spent a week of office [illegible] all rainy weather, and [illegible] succeeded only in finishing, at length the rough draft and final copying of the two reports, which went at once to [illegible]; [illegible] made from my books a [illegible] copy of the whole [illegible] [illegible] [illegible] better [illegible] [illegible] [illegible] assistants [illegible] finished their [illegible] in the Ubagawaji and Murakami region [illegible] Matsuyama and Tokoro. Two parties of two each, Messrs Inagaki and S. Maeda and Messrs Kuwada and Nishiyama took up the transit compass survey of the road from Ubagawaji towards Matsu[illegible] in order to connect the two surveys in a [illegible] [illegible] manner. [illegible] [illegible] parties [illegible] many lengthening portions of the [illegible] and Tokoro region, and began a [illegible] in the same plan as their former one. [illegible]
[illegible] with the [illegible] [illegible]
[illegible] [illegible] [illegible]

[illegible] of about two thousand feet above [illegible]
the bridle path of the country [illegible] recommending
to the friends of the region. Both sides [illegible]
flanked by a [illegible] mountain and [illegible]
[illegible] wood line [illegible] Lyttelton
which begins, and with [illegible] and [illegible]
this line, to one of the [illegible] was made
good [illegible] were in use [illegible] to Long Bay from
Lyttelton, & appeared [illegible] and [illegible]
and made their [illegible] at last one
day could find a good [illegible] more fit.

[illegible] Mayor, Council and Townspeople
the Colonial Secretary & Attorney General were able to come
to Orakei before my departure and [illegible]
would [illegible] further particulars respecting
in regard to the plan of [illegible].

[illegible] of Hobson's Road, an avenue
(now [illegible]) people [illegible] and a half
in all [illegible] or [illegible] place [illegible]
kind of worship at Kohimarama [illegible]
[illegible] near Orakei on the main
[illegible] Road, [illegible] and
[illegible] of grass at one [illegible] in
[illegible] & Tangiteroria [illegible] miles

FHC

57

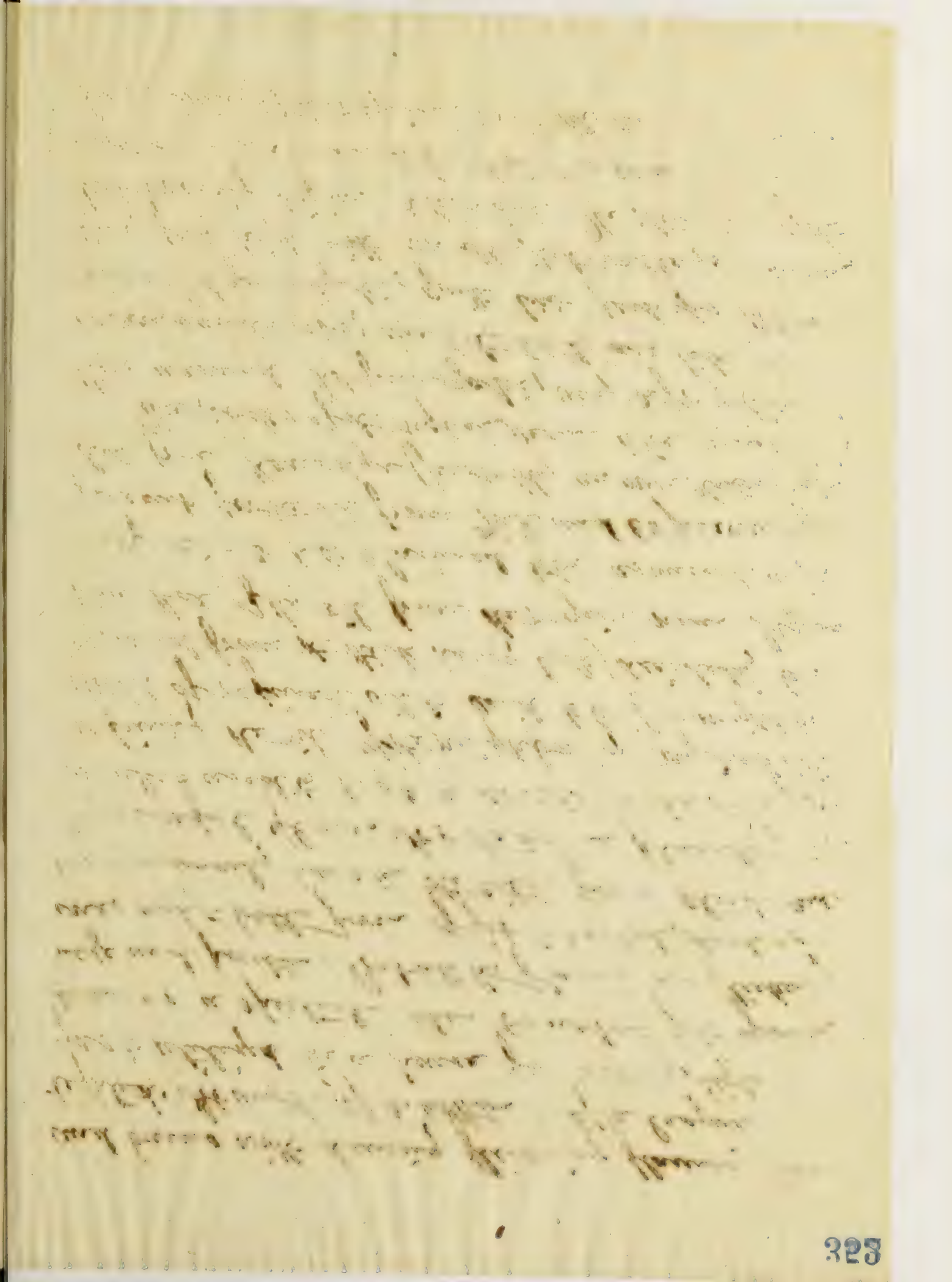
342

54

the hill about the Cayuga to go
Ojuga where he was for
back from a Seneca village
(so called and [illegible] Kanagh at the mouth
outlet [illegible], no [illegible] flowing by the
lake being [illegible] the [illegible] way back [illegible]
a little above the [illegible] Kanagh [illegible]
[illegible] [illegible] Kanadaigua, about
half a days [illegible] [illegible] [illegible]
a fine day [illegible] [illegible] [illegible]
[illegible] a spacious [illegible] natural gardens.
[illegible] of the hills [illegible] are like those
of Kanadaigua, from which it is distant four
leagues [illegible], for example [illegible] four
leagues distant [illegible].

The [illegible] lying [illegible] (5 [illegible]) has keeping
our way Northward [illegible] three
leagues and a half, [illegible] the [illegible] carthorse,
arriving at the [illegible] [illegible]
ush of several ridges connected with [illegible]
Portages into the Seneca [illegible]
[illegible], and with Kanadaigua [illegible]
[illegible] [illegible] mountain [illegible]
The sea shore [illegible]

6



64

at the mouth of the great Kimano valley &
close by the mouth of [illegible] a small
[illegible] & [illegible]
through the keeping [illegible]
to the bottom [illegible] very deep
black dense [illegible]
[illegible]
[illegible] & took at a small
[illegible]
[illegible]
a [illegible]

[illegible] which we had seen
[illegible] Kimano [illegible]
[illegible] valley [illegible]
[illegible] the Kimano [illegible]
[illegible] the [illegible] the [illegible]
[illegible] the [illegible] was a [illegible]
[illegible] and even mountainous [illegible]
[illegible] and the hills were [illegible]
[illegible] and hills, with the [illegible]
[illegible]

of leagues before reaching Wallabe. [illegible] would seem to be old volcanic mountains, but composed only of trap rock & various kinds of granite.

The north, at Wallabe Harbour was seldom any of the same grass apparently as that upon the west bearing slopes, & soft pumice rock, & clay with abundant dips. The amount of all was small & insignificant.

Wallabe is a fine deep & spacious anchoring, running for a league or more through the hills, at one point 300 feet deep, and at the [illegible] 900 feet wide. At the head between Shimmo River and the sea were low hills and the distance about (about two leagues and a half) the attempt was made some eighteen ago to cut a canal across, for the purpose of (as we have seen) of relieving the outlet of the Shimmo at Niigata from the [illegible] it was thought would [illegible] & lengthen the course of the river, the large town at the end of the canal. Of course the lowering [illegible] of river water would leave the [illegible]

thing of the kind, at least of any extent or a very
small scale; for we afterwards found that
in such a case only one or two men in a
village would know of the fact & would be
willing to mention it.

Such difficulties occurred especially the
next day (23 Oct.) when I saw the places of two
of gas at Ilitanka and went down directly
easterly up a narrow valley to the village of Yoma-
gashi, passing a place in the village of Okumi
(or Hitodzume) where it is said that some gas
issued three or four years ago, and visiting a
place near Yakunegashi where a little gas used
to issue. The same day we went onward a league
and a half westerly to Tochiwo, a large village,
and another league and a half southeasterly to
the little village Hiraka in a narrow valley among
high hills, passing a very small and little
gas place in the village of Nigoro. The lateness
of the hour made it necessary to stay at Hiraka
all night, although our baggage had gone on to
Nagaoka; for in the mountains the distances of
[illegible] out much longer than is expected before.
The next day (24 Oct.) I came [illegible]

high ridges [illegible] the Horse [illegible] plain
the Horse oil [illegible] and is commanded to
the north by [illegible] the village [illegible]
[illegible] plain again, [illegible]
the [illegible] plain [illegible]
the [illegible] we, passed [illegible] the oil
springs of [illegible]
[illegible] the [illegible]
[illegible] the N. land, [illegible] the village
[illegible] leagues and a half to [illegible]
[illegible] the great plain, reached [illegible]
the again.

The oil and gas appears from [illegible]
[illegible] the neighboring [illegible] all the
[illegible] this may be reckoned as belonging to
[illegible] down the leagues long from north to
[illegible] and at most half a [illegible], and com-
[illegible] detached from the other regions. Thus
the exception of the Horse oil wells and the [illegible]
of oil at [illegible] and beyond all the
[illegible] the [illegible]
[illegible]
the wells [illegible]

75

The next morning [illegible] ([illegible] Nov.) [illegible] from [illegible] [illegible] leagues [illegible] [illegible] [illegible] right [illegible] [illegible] [illegible] [illegible] [illegible] gaplin [illegible] [illegible] land of the village [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] on [illegible] [illegible], about [illegible] leagues [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] of [illegible] [illegible] with they [illegible] again [illegible] [illegible] [illegible] [illegible] [illegible] from going [illegible] [illegible]

The next morning [illegible] [illegible] small gaplin within [illegible] [illegible] [illegible] [illegible] of the village, and [illegible] [illegible] [illegible] ([illegible] and [illegible]) that [illegible] [illegible] and [illegible] afterwards [illegible] [illegible] [illegible] [illegible] the [illegible] the main road, four leagues and a quarter from [illegible]

We had [illegible] passed the last of the [illegible] [illegible] of [illegible]. The several gaplin near [illegible] and [illegible] [illegible] [illegible] rocks of the [illegible] [illegible] [illegible] [illegible] we had already found [illegible] [illegible] [illegible] [illegible] [illegible]

plain and [illegible] and [illegible] change the weather [illegible] [illegible] the almost [illegible] [illegible] to the [illegible] in the [illegible] [illegible] [illegible] [illegible] day [illegible] three eight leagues from [illegible] stopping at the last league to see the hot springs of [illegible] [illegible] [illegible] from grey [illegible] [illegible] the road. The [illegible] [illegible] [illegible] of [illegible] [illegible] old [illegible]

[illegible] [illegible] near a village called [illegible] [illegible] [illegible] [illegible] of nearly [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (new [illegible] [illegible]) [illegible] pebbles half a foot long.

The next day (6 Nov.) we [illegible] [illegible] [illegible] and within a league or so reached [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] a light grey old volcanic rock [illegible] [illegible] [illegible] and a [illegible] [illegible] [illegible] of [illegible] [illegible] a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] "[illegible]" [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

37

A few leagues further on we crossed the gently sloping [illegible] pass, by the village of that name, and [illegible] the [illegible] [illegible] that name, are formed of old volcanic rocks. The road [illegible] is [illegible] unwooded, uncultivated and uninhabited [illegible] a good place it seems for cattle grazing; the slopes and grass are [illegible] [illegible] [illegible] [illegible] for cattle. The [illegible] [illegible] [illegible] not bad, but [illegible] [illegible] [illegible]. Thence [illegible] [illegible] hill, [illegible] [illegible] of [illegible] volcanic rock, a white [illegible] pumice [illegible], [illegible] through [illegible] we reached Shirakawa, 7¼ leagues from [illegible]. The last part of the way we could see [illegible] mountain [illegible] with long volcanic slopes and on our right the sharp volcanic peak of [illegible], still [illegible] smoke.

[illegible] at Shirakawa [illegible] [illegible] and the [illegible] ([illegible]) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

24

he and Dicks and Lagrée [illegible] at the fair
Lagrée and Delaporte from [illegible] the
Cimmo and the Stadacona [illegible]
Acon Shibata, making [illegible] away as
the Stadacona was from [illegible] may be
able to get some idea [illegible] of the voyage
and coal beds. He will [illegible] the volcano
be made of [illegible] materials. Father
also made the Hungarian, Signor Lodovico
and Mr Mudge [illegible] Ojiya, and
on the way home [illegible] and Kamijoni
Kamo [illegible] about a league from Muika
Machi. Her legend [illegible] some of the wild
Kay, and their [illegible] entirely in my
to my distance and [illegible] and the
whole.

The assistants who had returned and
worked in the office a week from the 4th of
Dec[embe]r, mapping and [illegible]
day having already [illegible] Mr Kay
who [illegible] given to all officials after a long [illegible]
for their services [illegible] and having enjoyed
the [illegible] the duties of [illegible]
Gov[ernmen]t officials [illegible]

87

lawful holidays in order to hasten on the work and even without exception have always most unsparingly been working to further the interests of the Survey.

I hope within [illegible] few days to make a complete return [illegible] of finances of the Survey classified under [illegible] others of the [illegible] [illegible] has been some [illegible] [illegible] that will the ex[illegible]; even the papers [illegible] have hitherto been almost totally insufficient & in any proper method of keeping accounts. I [illegible] also within a few days to make a little report in tabular form to show the general character of the [illegible] which the past season. Later on, I expect to make special reports on the different oil fields & such reports can only be written after the completion of the maps, and that will occupy us the rest of the winter season. The mapping will take the longer for the reason [illegible] owing to long continued bad weather in the summer comparatively little mapping was done in the [illegible].

I have the honor to be

Sir

Your most obedient Servant

Benj. Smith [illegible]

[illegible]

Yedo, 31 Jan. 1877.

Geological Survey of the Hokkaido of Japan

A Report on the Progress of the [illegible]
Year of the Survey of the [illegible]
of Japan, by Dr. [illegible]
Geologist and Mineralogist to the

To His Excellency T. Okubo,
Minister of the Home Department

Sir,

I have the honor to make the following report on the progress for the past year of the geological survey of the Hokkaido of Japan that was entrusted to me last February.

[illegible] Cordova, Alabama [illegible]
31 January 1877

M. Malcolm [illegible]
[illegible]

Sir:

I beg you will forward to this Department the Receipt of the Land Department & Recommencing Papers in the progress of your pre-emption of the Old Lands, & Papers [illegible] Land Grant, and have the honor to be

Sir,

Your most Obedient Servant
Benj. Hewitt Eyster
Late of Pre-emption & Homestead Agency

Geological Survey of the Oil Lands of Pa.

A Report on the Progress of the Work done by the Geological Survey of the Oil Lands of Pa. by Prof. Benjamin Silliman, Jr. Geologist and Mining Engineer.

Contents.

Page.

Act of Legislature ... 3
Previous maps and reports ... 4
Meaning of the word ... 4
Preparations for the survey ... 4
Appointment of assistants ... 5
Preparatory information ... 6
Visit to Titusville ... 6
Importance of geological work ... 7
Bearing on the Oil business ... 8
Public information sought ... 9
Visit to the Oil Creek, Pithole, Cherrytree, Oil Creek & Allegheny River Oil Regions ... 10

and Kitchuka hot springs, Ishikawa 8
Pagoda Corporation 8
Accident 9
Ceremonies 9
Change of plans
Clapping
Report writing
Hōkuriji 13
Hama hot springs
Hama, Yuchaka and Kujiki hot springs and
Sawaji do. & Matsumoto 13
Horikawa Oil 13
Matsumoto
Matsumoto & Nagano 13
Nagano
Chinese Oil Lands
Nagano & Shiga
Continue travelling
Fishing
Land slips, Nagano & Shiga
Rain

3

Probability of widening Oil field. 17
Future trials 20
Pragmatic mapping or Surveying 21
Hauerbourgeois method 22
Rough Stadia method 23
Belongeria, Ubiquitous, Fluvia
Work in wards 27
Office work and Explorations 27
Well histories 27
Village maps 27
Kuaodza 28
Antiquity of oil well. 28
Etymology of names for oil and gas 29
Office work and explorations 30
Well digging 30
Comparison with Steam boring 30
Comparison of Steam and manual
power 31
Advantages of present method 32
Lighting 33
Proposed improvements
Mirrors

Inhalt ——— 5
Vorwort für Lehrer ——— 6
Einleitung ——— 8
Die Lehre vom Menschen ——— 11
Das Skelett ——— 15
Die Knochen ——— 17
Das Knochengerüst des Rumpfes ——— 21
Die Knochen des Kopfes ——— 29
Das Knochengerüst der Gliedmaßen ——— 34
Die Knochen der oberen Gliedmaßen ——— 36
Die Knochen der unteren Gliedmaßen ——— 39
Die Gelenke ——— 41
Die Muskeln ——— 45
Die Muskeln des Rumpfes ——— 48
Die Muskeln des Kopfes ——— 51
Die Muskeln der oberen Gliedmaßen ——— 53
Die Muskeln der unteren Gliedmaßen ——— 56
Die Haut ——— 59
Die Haare ——— 62
Die Nägel ——— 64
Die Sinnesorgane ——— 66
Das Auge ——— 67
Das Ohr ——— 71
Die Nase ——— 74
Die Zunge ——— 75
Die Verdauungsorgane, Nahrung, Verdauung
Die Zähne ——— 77
Die Speicheldrüsen, Mundhöhle, Rachen
Die Speiseröhre, Magen, Darm
Die Leber, Bauchspeicheldrüse ——— 81
Die Milz ——— 84
Die Atmungsorgane ——— 85
Die Nase, Kehlkopf, Luftröhre, Lunge,
Atmung, Atembewegungen, Husten, Niesen,
Sprechen, Singen ——— 87

Kanhiwazabi, Nagarda Konado ____ 58
Ajmangarh ____ Kundgir, Nicobar Ward
Kuchi, Tale oil and gas wells ____ 58
Kunda ____ 59
Kundgir oil field ____ 59
Survey ____ 59
Field ____ 59
Reserves & gas ____ 60
Physiography ____ 60
Geology ____ 60
Subsurface Data ____ 60
Reservoir rocks ____ 60
Kundgir field ____ 60
Survey ____ 60
Field ____ 60
Search for oil ____ 60
Geology ____ 60

Nagpur & Nagarda ____ 61
Nicobar ____ 61
Nicobar & Andaman ____ 61
Topography and geology ____ 61

Necessity for books ——— 69
Compilation for navigation ——— 70
Magazine Bibliotheca ——— 71
Magnetic variations ——— 71
Maine & Wales ——— 72
Maine, Penn. Yarmouth and
Augusta variations ——— 72
Mass. & Vegetation ——— 73
Mean for hour, Equinoxes and
Solstices ——— 73
Mercury & Field ——— 73
Extent ——— 73
Gold ——— 74
Geology ——— 74
Mexico & Texas variations ——— 74
Mineral oil wells ——— 74
Mountains & Mountain ranges ——— 75
Mississippi ——— & Yazoo rivers ——— 75
Mississippi & Missouri rivers ——— 75
Mississippi & Ohio ——— 75
Mississippi & Ohio ——— 75
Ohio & Mississippi ——— 75
Mississippi & Tennessee ——— 75
Missouri ———

Waitemata Harbour ——— 11
Devonport ——— 12
Waitemata Harbour ——— 13
Auckland, North and East
Coast ——— 14
Onepoto Gas Field ——— 78
Remuera Oil Field ——— 79
Ellerslie Oil Field ——— 79
Pukaki Oil Field ——— 80
Petroleum & Natural Gas ——— 81
Hauraki Gulf ——— 82
Hot Springs ——— 83
Islands in Hauraki ——— 84
Mokau Point ——— 84
Tauranga Hot Springs ——— 85
Rotorua ——— 86
Lake & Waikato River ——— 87
Kirikiriroa Point ——— 88
Maungakawa Point ——— 89
Waikato River & Tributaries and Lakes ——— 90
Kawhia ——— 91
Entrance Waikato ——— 92
Town Kawhia ——— 93
Town Raglan ——— 94

Iron Kurtosis ____ 85
Coal & coal oil and gas shows ____ 85
Office work ____ 86
Holidays ____ 86
Assistants' services ____ 87
Inclosed papers ____ 88

[illegible] Gardens, Natchez Miss, Ky
1 Feb 1[illegible]

M. Mitchell Esq.

[illegible]

Sir

I paid that in yesterday's report I omitted to weigh in copying some [illegible] 37 in regard to the Mississippi and Kentucky oil yield. There are 175 yielding oil, with a yield all together of 1[illegible]5 barrels (Kentucky barrels or [illegible] each well of 42 gallons (1[illegible]5 Wine) a day, and the largest well is 122 gallons daily. [illegible] convenient opportunity I will send the numbers in the original copy, but [illegible] for the information of any [illegible] of the numbers. I should not be [illegible]

Your Most Obedient Servant
[illegible]

and would not do for the Catalogue. The Catalogue having already received this from you (with the exception of some copies of the first part of it) I have to correspond in page & line and number; and, as in my copy there is a blank sheet for the purpose, having the proof & title of both parts separate from the rest and pulling as one even.

It might be well to attach to my volume a small printed slip explaining the irregularity of the paging, &c., as follows:

The Abstracts and Exhibits & Reports of some cases were by mistake paged separately. A few such copies got into the Reports of Proceedings distributed in April & June, 1876, and can now be united to the rest as follows.

Hoping to see you tomorrow, I am

Very truly yours,

Wm. Strong

Estimate [illegible] from 1st July 1880 to 30th June 1881
for the Geological Survey of the Hills

Chief Geological and Mining Engineer:
Salary 1 year @ [illegible] 1,200.00
House Allowance [illegible] @ 25% 300.00
Travelling do. [illegible] 200.00
do. [illegible] 100.00
[illegible] 1,600.00

Chief Assistant Geologist:
Salary, 1 year @ [illegible] 240.00
travelling allowance [illegible] 31.00
Tents do. 2 @ 30 60.00
Mules do. 10 @ 70 7.00 347.00

1st Assistant Geologist
Salary, 1 year @ 150 150.00
Travelling allowance [illegible] 30 @ 3 90.00
Mules do. 10 @ 70 7.00 247.00

2nd Assistant Geologist
Salary, 1 year @ 120 each 120.00
Travelling allowance 30 @ 120 each 100.00
Mules do. 5 @ 80 [illegible]

Douglas 1868

1 Copying ass't:

Salary, 5 mos. @ $65.00 ..... $65.00
Travelling ass't 50.00
Extra allowance ..... 100.00 ..... 215.00

12 Sub Laborers:

Wages 1 year @ 45¢ each 1642.50
Travelling and board allowance 1200.00
Extra allowance 10 @ $5 ..... 100.00 ..... 2942.50

Horse wages, 200 @ 2.50 ..... 500.00
Implements cost and repairs 200.00
Freight on 240 tanning 100 @ 14¢ 84.00
Miscellaneous surveying expenses 100.00
Postage and carriage 20.00
Printing forms and reports 1000.00
Office furniture and expenses 300.00
Ready money for contingencies 250.00

Kingston C.W.
3 Feb. 1877.

$9 396.50

Statement showing from [illegible] to 30 June, 1877
for Rental Collected & Expenditure for Same.

1 Payments		
Salary Keeper [illegible]		$ [illegible]
Sundry Expenditure		
Sundry Expenses [illegible]		32.60
Do. do. [illegible]		3.00
Sundry do. do. do.		[illegible] $ 735.60
Cash & Credits [illegible]		60.00
Balance in hand		1100
		$ 1038.60

[illegible]
3 Feb. 1877.

Probable Outlay from 1st July 1877 to 30th June 1878
for the Completion of the Works
including the Sum already voted.

Probable Income
Estimated, 1st July 1877 to 30th June 1878 (Rental) Land £1,170,16
Estimated, 1st Feb. 1877 to 30th June 1877, Dividends £903,15
Water Works:
2067.11
Estimated 1st July 1877 to 30th June 1878 (Rental) 153.0.60
2821.8.31

Hawkesbury Falls,
3 Feb. 1877.

My dear Sir

shall come and help entertain the company.

I suppose you get all the news and gossip of Yoko-
hama and Yedo through the newspapers or otherwise
and have heard all about the great fire that in November burnt
down the whole space (except the [illegible] godowns) from
near Nihonbashi to Kyobashi and thence to Tsukiji
including the Hotel [illegible] and the Yoshiwara, Walsh's
and [illegible]'s old place and [illegible] place where the
Prussian Minister [illegible] and others, and where the
[illegible] might [illegible] [illegible] [illegible] we heard the
[illegible] all about the [illegible] of [illegible]
[illegible] from 3 to 2½ per cent [illegible] by [illegible]
[illegible] of the [illegible] [illegible] the valuation of the land [illegible]
[illegible] in proportion, and the remission of a like amount
[illegible] taxes; and [illegible] [illegible] many the officials below
the [illegible] [illegible] [illegible] [illegible] on the 11 Jan. last,
[illegible] many of them [illegible] [illegible] [illegible] will [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] commotion of
[illegible] [illegible]; [illegible] [illegible] you will have heard
of the fire in [illegible] [illegible] burned down [illegible] and
[illegible] [illegible] [illegible] (or Beato's?) adjoining
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] the [illegible] [illegible] [illegible] [illegible] in the [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] that, including Jandons [illegible] are un[illegible] [illegible] no doubt you have heard [illegible] of [illegible] going [illegible] [illegible] that steamer with his [illegible] (the [illegible]) [illegible] a major in the army [illegible] [illegible] [illegible] in fact you are perhaps better [illegible]. [illegible] [illegible] I see my [illegible] friend, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] about living away [illegible] [illegible] [illegible] [illegible] [illegible] trouble. [illegible] [illegible] [illegible] [illegible] I fell from my horse [illegible] [illegible] [illegible] [illegible] and so injured the [illegible] of my [illegible] [illegible] leaving the back bone [illegible] [illegible] the ribs that [illegible] [illegible] unable to walk (except about the house) without [illegible] [illegible]. I had a chair made and was carried [illegible] [illegible] [illegible] [illegible] nothing but the lack of [illegible] and [illegible] so [illegible] [illegible], reduced my strength and health to a very low point and [illegible] [illegible] kinds of trouble made their appearance. [illegible] [illegible] [illegible] with my arms, but it was hardly [illegible] [illegible]. At length after coming home early in [illegible] [illegible] [illegible] [illegible] [illegible] parallel bars made, and [illegible] [illegible] strength and health by exercising [illegible] [illegible] [illegible] [illegible] [illegible] and probably [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Mr. Gower, Hiogo Col. Koji

My dear Mr. Gower.

I was extremely grieved to hear that your physician had ordered the necessity of removing a leg from the knee, but I am much surprised that it should have been a bone [illegible], and I am sure you will submit to such a [illegible] hope, happily, by help of [illegible] I have every reason to hope that the amputation will be very greatly lessened. I hear that the famous Dr. Hutchinson [illegible] walks about on such a leg without even a cane. After all, if your leg could be amputated [illegible] I have no doubt it could be with the help of the skilful surgeons we have here nowadays; for it is not [illegible] lately, and the amputation that sometimes is done on [illegible] the healing, should be completed [illegible] the result will be far better than the confinement in your [illegible] has been undergoing. Although you will [illegible]

by surveying through the woods, yet you might again enjoy the best of health and spirits, and be a useful [illegible] with your excellent brain and with your delicately skillful hand in mapping and drawing. It is really fortunate that it is your right leg instead of your right arm that is affected!

I did not go to you myself today because I am just getting rid of a bad cold and feared that it would make me [illegible] if I were to ride to you in this chilly weather but go in a jinricksha.

Yours very truly,
B. S. Lyman

General Estimate of Expenses of the Geological Survey of Illinois for the ensuing year

---

Chief Geologist & Engineer

Salary, 12 mos. @ 833⅓ $10000.00

Horse allowance 12 mos. @ 15.00 ..... 180.00

Travelling do. do. @ 2.00 ..... 150.00

Clerk do. 80 d. @ 5.00 ..... 400.00

Fuel do. 40 d. @ 2½ 100.00

Surveyor do. for season of 4 mos. @ 150.00 ..... 600.00

Chief Assistant Geologist:

Salary, 12 mos. @ 50 ..... 600.00

Travelling and Horse allowance, 90 d. @ 3.00 ..... 270.00

Fuel do. 90 d. @ 1.00 ..... 90.00

Paleontological assistant:

Salary, 12 mos. @ 30 ..... 360.00

Travelling and Horse allowance 90 d. @ 3.00 ..... 270.00

Fuel do. 90 d. @ 1.00 ..... 90.00

Draughtsman & Geologist:

Salary, 12 mos. @ 166.66 ..... 2000.00

Travelling and Horse allowance 80 d. @ 3.00 ..... 240.00

Fuel do. 80 d. @ 1.00 ..... 80.00

Laboratory furniture 1000.00

Brought forward $[illegible]

1 Clerk:

Salary, 12 mos. @ $[illegible] ..... $[illegible]

Travelling allowance, [illegible] @ $2.50 ..... $[illegible]

Rations do. do. 91.50 $22.50

12 Sub Inspectors:

Wages, 12 mos. @ $[illegible] ..... $[illegible]

Travelling allowance, 12 mos. @ $[illegible] ..... $[illegible]

Rations, [illegible] @ $[illegible] ..... $[illegible]

12 Sub Inspectors, mileage and expenses ..... $[illegible]

Office rent, repairs, fuel, &c. ..... $[illegible]

Stationery, surveying instruments, &c. ..... $[illegible]

Postage and couriers ..... $[illegible]

Printing, maps and reports ..... $[illegible]

Office furniture and repairs $1000

Contingencies ..... $[illegible]

Sundry moneys for contingencies ..... $[illegible]

$[illegible]

C. & O. C.

Chief Inspector

Assistant Chief Inspector

Approved this [illegible]

day of [illegible] 1871.

General Estimate or Expenses for
Lighting Light House
for the year ending 30 June, 1875.

Estimated Expenses of
Geological Survey of the Islands of Japan.
including the Hokkaido Colliery Field work,
for the year ending 30 June, 1878.

Expenses of Survey and mapping for year ending 30th June 1878 $ 20,000.00
Expenses of Hokkaido Coal Field work, included in the above 1878 $ 7,827.50

E. & O.E.

Benj. Smith Lyman.
Chief of Geological and Mining Surveys

Yokohama Feb. 9,
1877.

[illegible]

BUE

No. 17 [illegible], Hirakawa Cho, Kojimachi, [illegible] 18[illegible]

Drummond Hay Esq.
Manager Japan Mail.

Dear Sir

I return you herewith the four pages of proof received last night, and have [illegible] the Table of Contents so that I trust it may be [illegible] [illegible] and have made some suggestions on the back of the title page.

Of course the page numbers cannot be [illegible] until the report [illegible] type [illegible] the [illegible] form [illegible] will have to be kept in type until that time [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] often with [illegible] [illegible] [illegible] there will be no inconvenience. Otherwise [illegible] we will have [illegible] [illegible] again [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible]

No 17, Grahame, Hiradawa Club, Napier
7th Feb. 1877.

Dear Mr Strickland,

You are probably still in your
Kindly remembrance as I did last Tuesday
& proved yesterday. I am
but had forgotten Tuesday and
Dear Lord Bloomin should
e-mail on Sunday, make it Monday
Annual meeting 7th Mar; for I have plenty
to share.

I am requested by Mr Grahame to
send the enclosed to you, & probably
from the railroad Company; and for
the letter from Waikaka.

I should [illegible] have
formed, of Mr Grahame's standing
I have had constantly to blame myself
for or two during his return from America
I have never found it pay any regards
Mr Grahame is especially

Yours very truly,

[illegible]

No 17 Coleman Street Buildings
8 Feb 1841

Edmund Hay Esqr
Manager

Dear Sir

I believe I am right in stating that you
have received this morning a letter from the
Heading stating that I am employed by the
Public to collect evidence. I am very glad to find
that the Public have at last taken the matter in hand, and
am willing & desirous to see the prosecution fairly carried.
In addition to much weighty matter connected
with, you see Mr Mansel (perhaps without being
conscious of the impropriety of the act) has, by
publishing to the Public (very undeservedly as it turns
out) the fact that Greaves had turned Queen's
evidence, before any such statement could be made
public, so as to take a fresh and strong
I neither wish to add any reflection upon
your paper; but on the contrary should have been
glad if it had not published that statement which
tended to be a considerable drawback to the full
& fair hearing that the prosecution is entitled to.
I still hope that the prosecution may be fully
carried out by this paper can and will assist.
Yours very truly

413

Mrs. S. Shirley.

My dear Mrs.

I think it was a great mistake that you should write
Osgood to publish it, if he was willing to take it risk,
and no doubt many must be very much amused &
myself who would have been glad to read such a
account of so interesting a [illegible]; it must have been
[illegible] that was, such
[illegible] interesting and
you must have been almost overwhelmed with so many
for so long a time, book writing entertaining continuous
[illegible] many other things attend to. Your
evenings must be most agreeable ones, & your visitors
gay and [illegible] buggy rides parents; but
must have had a very busy [illegible] Last Summer. Where
you find time to [illegible] in the midst of
[illegible]? I have what is considered here a vast
[illegible] about a thousand volumes or more, and was ever so
[illegible] evening if it was only to [illegible] could
make a catalogue raisonné [illegible] buggy on the other hand could
[illegible] plenty of [illegible] class models in the country
[illegible] for the [illegible] to be.
[illegible] plenty of room
[illegible] for several guests at a pinch, perhaps you and
[illegible] could come to [illegible]? I should be delighted. As for lectures
[illegible] and anatomy you don't know what advantage you
last summer, when I made geological visits & several
[illegible] official
[illegible] the mountains. Of course it was necessary to
[illegible] the channels of the springs and their temperature ascertained
[illegible] [illegible] nothing and the naiads of the pools
[illegible] kind enough & [illegible] me. You can imagine
[illegible] quite [illegible] old bath
[illegible] were made in the Flinders he had so long
[illegible] many natural [illegible] Several
[illegible] big [illegible] little Naiads and Others were in general
[illegible] a most unfavorable impression
[illegible] [illegible] [illegible]

You see then that your slave of beauty's summer [illegible] not altogether without its amenities in spite of lameness, weakness and blue devils generally, the result of accident detailed in one of my letters to Mr. Lesley [illegible] June. The injury was not to the [illegible] nerve as you [illegible] but (I think) to the crural nerve which [illegible] in back bone just under the ribs; Meggy can [illegible] anatomical [illegible] [illegible] explain more precisely. I was drawn very [illegible] from back exercise by the time of my return in November, but after that rapidly gained, having had a [illegible] [illegible] made so as to take horseback exercise daily. [illegible] I can ride horseback eight or ten miles without [illegible] through the winter weather (it being nothing of the sort) is [illegible] [illegible] [illegible] and the [illegible] days I have begun to [illegible] out, and one day before I knew it I had [illegible] [illegible] without [illegible] pain. But the great curative [illegible] in November and December was what my excellent [illegible] [illegible] had in a letter recommended me to [illegible] [illegible] namely: "cheerful and comfortable [illegible] [illegible] with dinner friends." Fortunately even at this end of [illegible] [illegible] such friends are to be found. Mr. and Mrs. [illegible], a very nice Dutch couple [illegible] [illegible] [illegible] though the [illegible], with my [illegible] [illegible] immediately on my arrival the letters [illegible] [illegible] that they had attained being unmarried [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Calais Jan 11th 67.

Dear Mr. Beckwith:

We hope shall come
this evening and will be
a number of good spirits
& would [illegible]
attended [illegible]
in your dwelling, and
in appearance be unfavorable to their advancement

Yours truly

Ruf. Smith

[illegible]

[illegible]

[illegible]

[illegible]

audit is very possible that some arrangements or changes may be made with the Kirtland officials who no doubt agreed to the printing at your office mainly to suit my wishes. By [illegible] of the publication of the pamphlet may be hastened or [illegible] and the convenience of the Kirtland [illegible] and generally as well as yourself be greatly promoted thereby. If you can so arrange it with the work rapidly accomplished I should be well satisfied to have no change made in [illegible].

Very truly yours.

Geo. Smith Lyceum.

No 17, Gochome, Hirakawa Cho, Koji
15 Feb. 67

M. Malicharta Esq.

[illegible]

Sir:

A Japanese letter [illegible]

[illegible]

I suppose the [illegible] perhaps will merely for the present convenience of government [illegible] duty; but the information of the method will be great and such as to render it for [illegible] in future [illegible] Should the Tycoon [illegible] as if I should [illegible] this [illegible] letter [illegible] that I had [illegible] my friends [illegible] and had [illegible]

No 17 Yokohama, Nov 26 1873

Genl K. L. Otori,
Kosaku Kiyokuchi.

My dear General.

I acknowledge with thanks
the receipt of your two favors of yesterday, one in-
forming me of the receipt of my survey and of
my only private claim — & the Kobuchi, and the
other of that of my assistants and of their appoint-
ment & advising me that it came as before.

Inclosed herewith is a copy — which I had
already sent to Mr. Matsugata in answer
to his letter of the 19 in regard to the transfer. I am
anxious to protect the interests of the govern-
ment & people, and assure you, and if neither
my friend — incident of mere
— proposed change —
— & it. But I will —
— communicate it as much more fully
— I intend to —
— Tokio —

and present year would rather require & than [illegible]
great considers the Colonies entitled exposure to [illegible]
falling upon the other party & though I can hardly
a matter of doubt but any instance of bad faith
the part of the government, which towards its own
subjects or towards foreigners must make it [illegible]
more and more [illegible] when foreigners will be [illegible]
& confidence. But jurisdiction, or a recent
convention, allowing its effects upon treaty; a day
that perhaps no Japanese will more hastily, rejoice
[illegible] I should. I cannot but think that whatever
material wealth any breach of faith might bring to
country or to any part of its population yet the most
important reform and the one most conducive to
prosperity in the end would be a constantly growing
and creative regard for the inviolable sacredness
the promises of the government.

I am,

My dear Seward,

Very truly yours,

Hon. Wm. H. Seward.

[Copy]

No 17 Gordon Square, 15th March

M. Mastrapola Esq.

Sir

I enclose a letter which I am told is from your son, in which I suppose any answer has been required from the Admiralty & the Foreign Office, but that any question in the letter will be the same as if you had written to me.

I suppose the answer may be sent to the Admiralty perhaps best of all, for the greater convenience of the government in general, but also for that of every individual; but it is of importance, & the method not a little so, great and such as to make the most that important future misunderstandings may arise? To tell the truth I assume that the very same as if I should send without previous consultation an English letter & my letter informing him that I had [illegible]

the agreement made with me a
[illegible] for a like formal release in regard
thereto to be executed before I receive the money agreed
to be paid with me to be paid?

I have the honor &c,

Sir,

Your most Obedient Servant,

Henry Russell Ryman,

Chief Engineer and Planning Engr.

Miniconjou Creek, 14th Feb'y.

My dear Godfrey,

Here is another
opportunity of writing you;
but I have been so ill with
the cold & consequent
pain that I could not write
you last month. Both my
throat & head are still very

[illegible]

Yours truly
Jesse Smith Lyman

No 17 Gordon Terrace, Hindhead Edin. Oct Mach
5 Feb. 1877.

Dear Mr Hay Esq.

Manager Japan Mail Yokohama

Dear Sir

A couple of weeks ago you were kind as to send me the "Yearly Progress and Seven Coast Reports" and at length been finished bound up and that you would send them up to me. I have not yet seen anything of them here, and beg to inquire whether they were really sent, and if they have not been, beg that they may be forwarded at once.

Within the past few days or so I have twice written to you, but as no answer has come to hand it is possible that my letters have miscarried. I therefore enclose herewith the body of the one and send it by registered post.

Yours truly yours.

Benj. Smith Lyman

[illegible]

[illegible] Miyakawa Chō, Kōji Machi, Yokohama.

[illegible] Japan Mail, Yokohama.

Dear Sir:

It is absolutely [illegible] for me to meet [illegible]
[illegible] [illegible] [illegible] by Mr Hilditch
[illegible] [illegible] to be referred to in my last and
with [illegible] may have no [illegible] understood as to think
[illegible] [illegible] [illegible] I said then, there are [illegible]
[illegible] reasons for impatience at the delay.
[illegible] [illegible] [illegible] two months that the remittance
must be [illegible] hands, and so far as [illegible]
[illegible] [illegible] [illegible] page [illegible] [illegible]
though it would hardly require [illegible] to
[illegible] a single [illegible] your weekly [illegible]
though you gave me to understand that it would be
finished a month ago.

[illegible] [illegible] for some reason [illegible] which
[illegible] what must [illegible] at least [illegible] a copy by
the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
from the former [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] that it may reach [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

burdensome upon you. In that case pray tell me so frankly at once; and it is very possible that some arrangement for a change may be made with the Kailakudi official who no doubt agrees to the printing at your office mainly to suit my wishes. By such a change the publication of the pamphlet may be hastened several months, as it would appear, and the convenience and interests both of the Kailakudi and of myself as well as your own be greatly promoted. However, if you can go on with it with equal economy & expedition I should be well satisfied to have the work continued.

Very truly yours,

[illegible]

Gen. R. S. Ripley

Rosaken Engelbrecht.

My dear Sir

I have to thank you for [illegible]
of yesterday with the enclosure [illegible]
for the Calendar. [illegible]
and I will endeavour [illegible]
not quite come up [illegible] expected from a foreign [illegible]
by Officers. Here [illegible] for myself certain I take about
the division of [illegible] having a line or about
three from [illegible]
the Railroad [illegible] which can be extremely
important yet when [illegible] like a foreigner upon
forcibly. In glancing hastily through the four pages of
the Mineral Catalogue I have noticed also quite a
large number of errors and have taken the liberty of
marking them. Although [illegible] pages were considered
ready for printing they are full of more careless
than I think I have [illegible] first sent to me for
correction; and [illegible] Mr. Mitchel's house
for [illegible] Catalogue [illegible]

Margin was almost blank with correction. To be sure
such a book from the Stranger's pen would be
especially difficult in a foreign press; and one of
the errors was perhaps due to the original m.s.
script. The correction of such proof is very difficult
or impossible to one not trained & bred from youth up, and with
the style and position of one's letters; for a compositor
& proof reader is chiefly noted old MS letters in
distant spelling, details & abbreviations.

A letter came last night from the Japan Mail
Office with some explanation of the unusual circum-
stances that have caused the great delay in printing
my report. Have sent with a promise to go on with
the work rapidly, now. I will write to-day to inquire
what would be the cost of printing the new report
here, and if it can be undertaken very soon; and
the answer is satisfactory and the old work is not
carried through rapidly (as we can print out by
a few days) I would rather prefer to have it done
so for printed there [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

No. 17, Gochome, Hirakawa Cho, Kojimachi

17 Feb. 1877.

Drummond Hay Esq.

[illegible] Consul General, Tokyo.

Dear Sir:

I have to thank you for your [illegible] of yesterday, and [illegible] Chairman [illegible]. [illegible] in the report already [illegible] [illegible] up at once [illegible] think the other report [illegible] pass through the press. I would like to have 100 copies of the [illegible] [illegible] you [illegible] without [illegible] copy may be put with one of the 100 copies of [illegible] report; and all the copies [illegible] may be [illegible], as it already stands. The imperfect copies (of [illegible] pamphlet [illegible]) from the [illegible] and of the pamphlet may be stitched together, if you please, without any [illegible] [illegible]; so that they may be distributed to those individuals who have already received the former part of the pamphlet and the copy of the [illegible] [illegible] [illegible]

If you are [illegible] [illegible] [illegible] to [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

prefer to have the work done here. Please inform me at once what would be the cost of painting in the same style as the Kaiserhaus before, & how long it would take.

Yours very truly,

Benj. Smith & Sons.

Mr. Cockburn, Hindmarsh Colo. Royal Mail
19th Feb 1841

Dear Sir

By means of a safe and cheap conveyance I have at length obtained possession of the Specimens which I promised to procure for you. They were carefully put into a box with Indian Corn after they had been [illegible]

[illegible] came safely to hand, and were brought home on Saturday afternoon. Mr. Hay says there are 491 of Dr. but I take the liberty of copying my own packet for Birds & Eggs and I make up the whole 500. I have taken care to attach the [illegible] to each egg to prevent confusion, as I find they may be easily [illegible] the Nests & Eggs [illegible]

Japan Exploring Exp. Hakodate Bay, Yezo
20 Feb. 1854.

Dear Sir,

I received Secretary Conrad's letter of the 17th Jan. & proof received by last mail. The views are changed in consequence of some of the ships not having been ordered to the Bonin Islands and a considerable number of boats & stores are to be taken more immediately. Capt. Gillespie will give further attention to your wishes.

I am very glad indeed to know that the printing will go on rapidly, and trust that the account of this Expedition will be quickly & widely read. I hope the new arrangements may be extended to you.

Yours very truly,
Benj. Smith Lyman.

The three copies of the last printed report came safely to hand on Saturday afternoon, and I [illegible] Engineer Corps [illegible]

B. S. L.

[illegible] Hirakawa Cho, Koji Machi,
22 Feb. 1877.

Dear Mr. Yamauchi:

I send you herewith ten copies
[illegible] Kayamania
& go with the [illegible] And
the Kentakuki received [illegible]
shall write [illegible] for the table [illegible]
& go with [illegible] But [illegible]
suppose just [illegible] published shall
be sent to the [illegible] received the corresponding portions [illegible] but
hereafter may be bound together and
make the [illegible] complete again

Yours truly

Joseph Hardy Neesima.

No 17, Cockburne Hindostan Club, Regent St
22 Feb. 1877.

Drummond Hay Esq.
Marquis of Salisbury's Mark, Hatfield.

Dear Sir:

The bundle Case & Comd yesterday containing 34 pages of Letter Copy & the Table of contents and the rest of the Manuscript Letter & the end, the other half with the Table of Contents and Index complete for your transcription

Could you send also the Table of contents and the page for the latter half or for a portion of them? In binding the whole pamphlet together those who have the separate parts of it will find the table of contents convenient for reference. It is no hurry to have the table and title page for those 17 pages that I had separately from the reports.

Yours very truly
Obey Smith Esquire.

I perceive by the address of the bundle and yesterday's letter that you are under some misapprehension. I have not been in the Foreign Office for nearly three months and have nothing to do with the Egyptian affairs, and the [illegible]

Ed. Jefferson, 22 Feb. 1[8]

D. T. Perry Esq.

Boston, Massachusetts.

[illegible] November last
[illegible] beyond the Rocky Mountains
[illegible] Exhibition. [illegible] Congress to be held
[illegible] and Paris. [illegible] are engaged
planning & doing anything in furtherance of the
proposed plan; and I hope that several more
of our maps may be ready for the Exhibition.
They are gradually getting printed; but as some of
them are very large & work goes on slowly with
the limited facilities we have here. Perhaps some
of them could hardly be admissible to the exhibition.

I am glad very gratifying news as to the health
health and spirits of you & your family. In spite of
your early hours I fear so much ill health. I trust there
is [illegible] (Thanksgiving Day)
[illegible]
Please write soon
[illegible]

[Telegram]

From

Lyon

To

"

"

Japan Mail,

32 Yokohama.

For Kaitakushi seven hundred, for me five hundred, in all twelve hundred.

No 1, Cochrane, Hirakawa Cho, 22 Dec 1877

[illegible]

[illegible] Japan Mail, Yok.

Dear Sir:

I have understood that a
[illegible] wished you to send [illegible] copies
of the general report and that according to my
request five hundred copies (500) were ordered
[illegible] Mail [illegible] making in all (1200) twelve hundred
[illegible] making in all (1200) twelve hundred
will be safe in sending that number and
to Kaitakushi Hall and [illegible] to
Hall have sent you. I am now at
[illegible] and as they will not receive
[illegible] before morning I [illegible] also a [illegible]
[illegible] you may wish to send it with
Yours very truly,

[illegible]

No 17 Cochrane, Hirakawa Cho, Kojimachi.
23 Feb. 1877.

Send K. S. Otori,
Kōtsūkyokuchō.

My dear Friend,

I have to thank you for your favor of yesterday announcing the removal of your office to Shiodome. Knowing well your kind disposition towards me, I feel sure that your opinion I heard is what you consider for [illegible] best interest. I can receive no complaint in respect of the [illegible] Government will make [illegible] my proposal; and I [illegible] for [illegible] City Gate. You might lead a stranger to suspect that something wrong lay behind it. But you are too well [illegible] history in Japan to [illegible] being unaware that I should carry out [illegible] to the advantage of the government as [illegible] myself to be [illegible] in consequence of [illegible] of my [illegible] Ōtsuka [illegible]

[illegible] which you cannot well communicate
& suppose that any loss in consequence
the present proposal would be much greater
called in ordinary circumstances be expected.
For my own part, after our talk, it had only
occurred to me (& I can positively state, and
yet fixed, under a sense satisfactory) to
plate for some [illegible] expected loss from
any action of the government, or prepay
merely in regard to taxes, but in case
removal of the capital from York.

If our office should be removed to Hudson, I am
not able to see how I shall be able to keep up my present
spending daily an hour or more in office beyond the
[illegible] (in order to give the assistants a chance) for the
time going to and from office, [illegible] take up at
least forty minutes a day; and already it is necessary for
& neglect seriously my private letters (connected, for instance
with the proper care of my bodily and mental health, a
reasonable exercise, studies, social intercourse and correspondence
from what might seem to be merely my own personal
business is, you see, closely connected with my power
& serving the government.

I am, Hayden Renard, Esq., very truly, [illegible]

[illegible] Kirkwood Ohio Feb 4th
1877.

Dear Mr. Simmons:

[illegible] I send you
thirteen copies of the title page, table of contents
and list of works [illegible]
[illegible] Hay, & still have remain-
[illegible]

[illegible]

The [illegible] pile are those
I have after you favor Monday
morning & if [illegible] me suppose.

Yours very truly
[illegible]
[illegible] Smith Wyman.

[illegible], Miratawa [illegible]

25th Feb. [illegible]

My dear Mr. Cruickshank,

After my return last [illegible]
I received a letter from Friburn Rev. [illegible]
stating that [illegible]
asked a question [illegible]
Who you ask [illegible]
[illegible] Church?

I can assure that [illegible] mistake in
address the enemy may have gone but it
was by hand, or but possibly by a mistake in
reading my name in your letter to Friburn
many men have been called & the wrong name
If I remember rightly you stated in that letter
unfavourably, except but I do not remember noticing
whether it was that or not. I would be much
obliged if you would [illegible]
for [illegible]
[illegible]

[Foot note to be appended at the end of the paragraph beginning "The Lime or Coal Bearing Group" on p. 82 of the manuscript, just before the following paragraph beginning "The Auriferous Slate Group"]

*

It is [illegible] by a specimen of the rock crossed by a gold bearing vein. It seems very likely that the metallic veins of Nova Scotia as well as those in Echigo, Sado and perhaps all the veins of ancient old volcanic rocks, belong to two or three epochs of veins formed in all metamorphic rocks in addition. The probability, then, is very strong that the veins and beds of coal found in the old volcanic rocks. If fossil plants in Nova Scotia may be regarded as Devonian, that is not yet ascertained, although the Sauroges is found in [illegible] and may all be [illegible] certain workable veins. The only volcanic region in Nova Scotia is well known to the Carboniferous and Devonian Island, and as already shown it has been found to contain a large number of metallic deposits though, as it has generally been [illegible] all too poor to work. — 27 Feb. 1877. — H. S.

No 17, Grahame, Auckland Ch, Kajiabanga
27 Feb. 1874.

Diamond Bay &
Messrs Lafaurdet, Colchester.

Sirs,

Yedo, Japan, 27 Feb. 87.

Dear Mary:

Since my last letter I have to thank you for your favor of the 16th of October, by which I am glad to learn that Lizzy as well as yourself were getting on as well as could be expected. I trust that by this time the worst of your winter is already safely past and that by the time this can reach you the weather may be spring like and warm. It is already here as many days and I have several plum trees in bloom in my garden. One or two of these are very early trees and began to open their flowers on the fourth of this month although it is true that we had a snow storm of three or four inches. It then again threw back Winter days for, but it did not amount to anything. The nights however are still pretty cold and a little ice forms. On sunny days my verandah closed in with glass is very warm, and this fact justifies my theory that the Japanese dwellings so open to the outer air can be made comfortable in cold winter weather, probably even in the coldest weather, merely by closing in the verandahs with glass, as the Japanese are accustomed to do with their sliding screens with boarded doors. [illegible] I [illegible] for a little fire [illegible] for the Japanese [illegible]

Yedo ... as the climate of Yedo is ...

the climate of Kioto is still better, milder ... cradle ... subject to high winds such as we have ... have had several times lately; but it must be warm ... summer. As for my part, am already opposed to the winter at Kioto, for my idea is that the capital will be moved back to Yedo. Indeed the headquarters of government already ... few days past, but only partially as it is said. The ... Prince of Satsuma ... the progress of the rebellion that ... broke out in the ... weeks past. It is said that ... Imperial ... Kioto ... has received in this ... years. Most that time attempts ... "revolutionary" ... established here, evidently to occupy the ... and remove thereby any danger of a ... movement. If the government just ... Kioto ... peacefully it will have nothing further ... and the past ... old shogun and will ... Kioto, where almost every Japanese ... Yedo ... would be glad to have it; for Kioto, the ... for so many centuries is almost worshipped by the ... and is to them what ... is to Italy. On the ... hand if the rebels are victorious they will still move ... change the seat of government back to Kioto, ... and the ... and move in agreement with their reactionary ... That the Emperor, Empress & Empress ... made a visit at Kioto ... first in many years, ... rebellion broke out and their return is indefinitely ... the Imperial princes are also there, and now ... chief ... department (a ministry) are there and the ... Prince ... Satsuma ... great ... army ... rebellion, many troops and bodies of police sent forward ... pestilence ... and robbery. Last night I dreamed ... my ... and ... my neighbors ... with ... to a ... and ... be ... I had ...

W. H. Goodenough, Hirtshals, Jutland
3 March 1877.

Edmund Hay Esq.
Grange Lane, Gateshead

Dear Sir,

I return you herewith Mr Jay's
account of sales for £42.4.5
46.47.15.5d, the [illegible] £4.3.10. Receive
[illegible]
in the [illegible] and [illegible]
signed by the [illegible]
marked [illegible] and I am [illegible]
again for £2.[illegible]

I [illegible] to [illegible] in [illegible]
another [illegible]

Yours.

W. H. Goodenough

No 17 Lothbury, Hirakawa-cho, Yokohama
5 March 1877.

Genl K. S. Otori,
&c &c &c Yokohama.

My dear General.

I have to acknowledge
[illegible] your favour of [illegible] and
[illegible] regard &
our official [illegible] I will [illegible]
office here [illegible] considered
in my last letter. Although that plan in my
opinion will be still more advantageous
[illegible] the government than to me, I had
no idea in proposing it to demand any
guarantee against loss; because it will regu-
larly & conjunctively, bring additional
[illegible] as my part [illegible] plan of a for-
mer letter.

I am,
My dear General,
Yours faithfully
[illegible]

No 17, Yokohama, Hirakawa [illegible]

Durrand Hay Esq
[illegible]

Dear Sir:

[illegible]

I am [illegible]

[illegible]

No 17, Yorkshire, Hindhead Chiddingfold,
Godalming. 877.

My dear Mr. Emily Tennyson:

I owe you many thanks for
sending me the Bill of exchange in favour
of [illegible] for [illegible]

I think Ky must have [illegible]
[illegible]

from Edmund Hamilton for Rizzo, and
for have changed it many times
Mr. Boulet and [illegible] for our benefit
[illegible] fully [illegible] in regard to the
bill going [illegible] and [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]

No. 17 [illegible], [illegible] 6 Mar. 1877.

Gen. K. S. [illegible],
[illegible]

My dear General:

[illegible] of your favor of the [illegible] of this month received yesterday. I beg to enclose a Japanese list of the things we have in our possession for the purposes of our survey. The list is a [illegible] one by Mr. [illegible], but is copied from an English list lately made by myself [illegible] the work. There is also a list in which is marked the number of the things that need [illegible] before we go into the field again.

I rather object to putting my stamp to each [illegible] on account of the [illegible], as [illegible] such stamp can be counterfeited, and [illegible] my signature instead [illegible] for the whole list in addition to the [illegible] of all the [illegible] attached to each [illegible], as is accustomed to that [illegible] and [illegible] feel [illegible] of any danger from it.

I would object [illegible] to [illegible] the list [illegible] inspection of the [illegible] [illegible] [illegible] a few [illegible]

[illegible] official [illegible] I have nothing [illegible]. I [illegible] insist on adhering strictly to the terms of my [illegible] namely that all official communication between me and my [illegible] and the government shall be [illegible] through and by the Chief of the Bureau or Department to which [illegible] and myself. I am aware that in my note of [illegible] I did not [illegible] shall be strictly confidential, and trust that the [illegible] I consider the obligation to be binding [illegible] Should you have acknowledged in the letter and in person [illegible] such communication has been made, I shall have no [illegible] I do not know any [illegible] in the case. There [illegible] peculiar case in regard to [illegible] might [illegible] in reference to [illegible] that could otherwise be treated [illegible] but still it [illegible] can also apparently a breach of confidence, [illegible] for it would [illegible] subject it to a little inconvenience in order to carry out the [illegible] arrangement. At least I am constantly afraid that I [illegible] and [illegible] practice may lead to some serious embarrassment [illegible] hope it has done so [illegible] in the matter of the proposed [illegible] our surveys of the Colorado. I will suggest that [illegible] which [illegible] wish to be communicated to the President [illegible] be written as [illegible] if you prefer, addressed to me and [illegible] with a request [illegible] I shall then no doubt be very willing [illegible] to the President [illegible] your writings circulated [illegible] the latter perhaps simply [illegible] you get hereafter official [illegible]

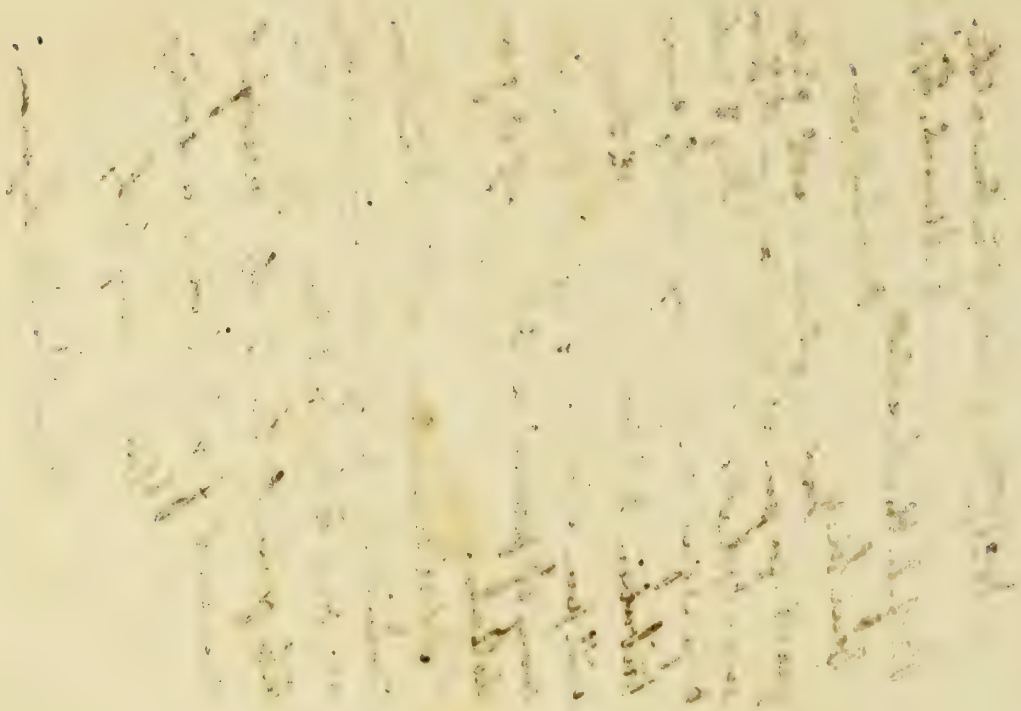
Norfolk, Nebraska,
March 8th, 1877.

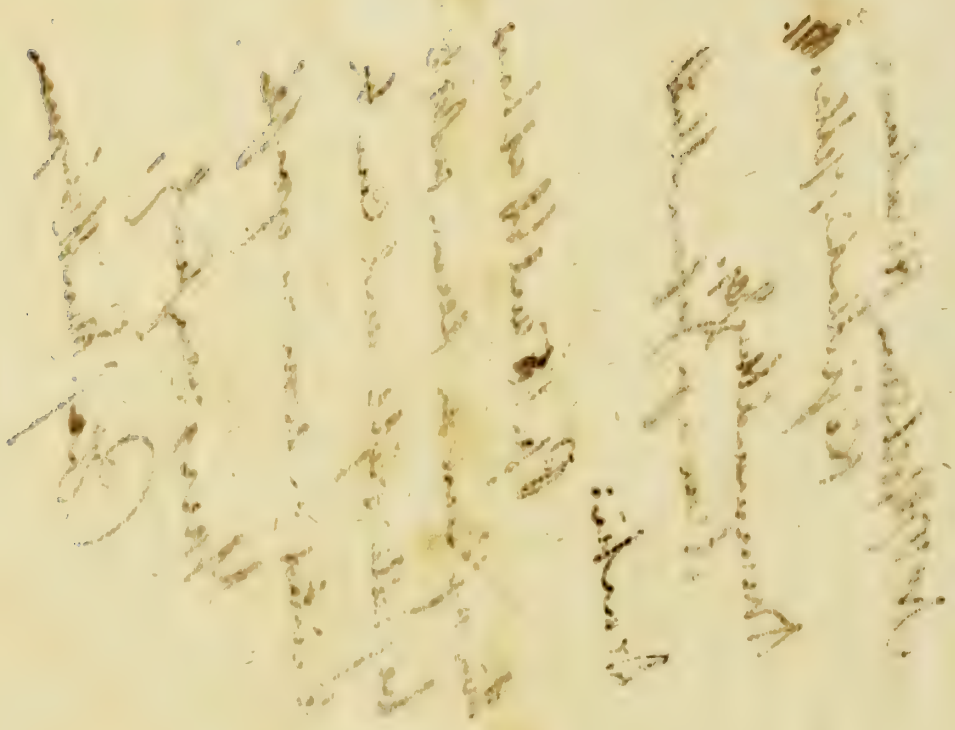
Rev. D. H. Marshall,
Kearney.

Dear Sir.

In compliance with
resolution passed at a meeting
held, received from the Treasurer
of the Parish Society $ 10 to send
you, I write this letter, to ask
you, yearly contribution of $.
for, and the terms on which
you will preach in this place
if agreeable. Enclosed is
five dollars. Should you retain
whether the last year's contribution
you will write and if you are
the Parish

402





W. H. Gardiner, Hiram Lucas & Chas. Kopitke,

Pittsburgh, Pa.

Gentlemen:

[illegible]

Yedo, Japan; 10 Mar[illegible]

My dear Joseph:

I sincerely hope that my silence has not given you the very incorrect impression that your [illegible] interesting favors of Aug. and Oct. 1?3 and of [illegible] November were not most thankfully and appreciatively received; but I am [illegible] [illegible] in respect of my [illegible] correspondence [illegible] [illegible] [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I have [illegible] [illegible] [illegible] writing. [illegible] [illegible] with [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] years [illegible] which you spoke of in the [illegible] as if you had [illegible] [illegible] [illegible] [illegible] [illegible] you had [illegible] nothing of the [illegible] [illegible] [illegible] in the [illegible] about the [illegible] [illegible] [illegible] [illegible] [illegible] by your [illegible] [illegible] happiness. By the [illegible] [illegible] [illegible] [illegible] your [illegible] of your house and [illegible] [illegible] [illegible] [illegible] [illegible] if I had [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] you are [illegible] that [illegible] [illegible] is very apt to [illegible] [illegible] [illegible] [illegible] and that you [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the life and [illegible] [illegible] [illegible] [illegible] [illegible] of complete [illegible] [illegible] [illegible] [illegible] in the attainment [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] you [illegible] [illegible] [illegible] [illegible] [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

feeling, lest the appetite might become [illegible]
should become [illegible]
Illinois who says, Surely wants to pay what Chinese
& you must have by this time perhaps [illegible]
[illegible] the present [illegible]
[illegible] that [illegible] a capital is not
good deal in [illegible]
much make the most of them [illegible]
will [illegible] enough to make up for [illegible]
about one sixth of our [illegible] but [illegible] you will
remember [illegible] that [illegible] are more
our Hogs [illegible] and [illegible]
[illegible] [illegible]

You might think that in all that space there would be plenty of room for a single man's modest household belongings; but we never to live next door to Mr. Smith, No 14 (who has a wife and three children) we would be rather troublesome here, and he has to rent a factory there).

I am not to take charge of the premises; the number is the same, Bank, but in the main building and not in the factory building on the street front. My cook (Ching) wife and an adopted boy. The "boy" has a wife. My personal staff finished off with a cook by the government way formerly, my private cook and Boy Ah Ching, "boy" and the like with me. The gate-keeper has a daughter and the night watchman has a son; these go to the public school. One of the messengers has a wife and three children. The janitor, messenger and gardener and messenger has a wife and three children. All of these live at No 14, where his wife keeps the gate. So you see we are a good family after all, if I am nothing but a coolie, old Tuckabee "as you will be sure. In the right wing of the house to I have commenced putting up two additional large second story rooms over the southwest half of the main building; for there would be a fine view from the building Fuji mountain in the distance. But I have lately had strong reasons that the capital would be removed soon to Kyoto, so that it will be a great loss in selling the place. Nevertheless I am pushing the repairs, and in a few months and have already made the second floor two only, three feet wide and the front and back walls were not connected; I have widened the floor to the full width of the room (10 feet) and have floored the whole, including the filling up of the gap. The living room is in the place of the two big rooms of the kitchen which the place of the former was a mere middle room. There has also been much trouble in the tearing, papering, flooring, fitting and the like, besides replacing broken tiles, raising of lumber, etc. repairs and so on. At length however they will begin to look through the worst and within three or four days the house will be in passably good order. I am extremely thankful that I have a nice house of my own, specially [illegible] to me [illegible]

Lord, and do remember poor me, I have
distracted, and have continually been thinking
blessed fool to have taken so big a plan and
all the business of three months with troublesome
things that after all I asked no greater
me comfort. In January
of the offices were vacant in a few days
you to move into we moved into my unfurnished
and Study, for a while at least a new office was
but at such a distance and in so bad
and the permanent indelapidment of the
agreed to. So
dearer than and the back verandah are all
room for the purpose, as this may
simply taking out the sliding doors and
till a room or two left for any guests who
This is a two storey
in which our surveying
police and the theft a couple of "rotten"
a burglar entered the northern one and came
but was heard by
and escaped at the
A few days after
night to have taken the same burglar
burglary entered the yard from the same
other corner gate. I measured his
and had strong suspicions but
proof. The police have been diminished in
cality in order to send some to the
and there has been a good deal of lawlessness
in consequence of
an encampment against mine dinner
of our neighbors
but we have been spared the

B&F

[illegible] 12 March, 1877.

Dear Mary: When I wrote you a fortnight ago the [illegible] [illegible] catching the mail; as this may reach you [illegible] still no letter has come from you, and I begin to feel a little anxious [illegible] it may be that you have no good news to communicate, but sincerely hope there is no bad news to be held back. I write now [illegible] inquiring [illegible] nothing new to the other letter [illegible] not much news either [illegible] [illegible] the rebellion is pretty carefully conducted by [illegible] government, and there [illegible] [illegible] very important battles [illegible] very decided victories on either side. I should not be surprised if [illegible] should last a long time, though the government [illegible] it would seem overwhelming odds in its favor [illegible] nothing, I am rejoicing at the prospect of [illegible] going free again from the [illegible] and blundering [illegible] and hope with [illegible] [illegible] for living my health [illegible] may revive. But already there is talk of my going into the country at least for a trip of eight [illegible] (on the Island) within a month. But the [illegible] travelling [illegible] hardly begin [illegible] [illegible] of the troubles in the [illegible] [illegible] As you [illegible] [illegible] house [illegible] [illegible] [illegible] give you some [illegible] [illegible] [illegible] writing [illegible] [illegible] [illegible]

484

[illegible] a neighboring house where he committed
He left his tracks for me to measure again. The [illegible]
now getting [illegible] again, and the night watch
man is more vigilant, so there is again probably no
further danger. Moreover I have been having the fence re
paired and one low bit replaced by a high one; and have
been meditating a plan for putting an electric wire all
around the fence so that a burglar [illegible] [illegible]
announcing [illegible] by [illegible] ringing of a bell.

[illegible] and [illegible]
[illegible] from the [illegible] of [illegible] report [illegible]
[illegible] [illegible] [illegible]
[illegible] of Texas will [illegible]
[illegible] [illegible] [illegible], although
it will be but about 3 pages. The [illegible] in [illegible]
are gradually getting [illegible]; but [illegible] rapidly as
[illegible] [illegible] here. As soon as the general report
[illegible] printed my yearly report (dated 31 Jan. 1877) is
to be printed at once. My office is now permanently es
tablished at my house for the rest of the season at
least, and takes up all the south [illegible] part of the house
including the back verandah, three or four small rooms
[illegible] a long corridor. The plan was adopted partly for
my convenience as I did not wish to lose 40 minutes every
day in going to the unfavorably situated house [illegible]
[illegible] a month ago [illegible] as an office. There
[illegible] room enough left in the house and even two
rooms for guests, besides a small second story room over the [illegible]
[illegible] occupied by a servant. Nevertheless the [illegible]
[illegible] [illegible] is [illegible] man and gardener or [illegible]
[illegible] lives next door [illegible] he has a wife and [illegible]
[illegible] who would be too noisy here. [illegible] [illegible] ago [illegible]
[illegible] [illegible] who has a wife and three children, so [illegible]
[illegible] (including the night watchman) [illegible] in the front building [illegible]
Counting the force at No. 14 it makes [illegible]
[illegible] for the family of a bachelor.
[illegible] [illegible] Your affectionate [illegible]
[illegible]

Mineral or Hot Springs.

Köri.	Village.	Name.	№	Heat. Centigrade Degrees	Quantity. Gallons per minute	Character	Remarks
Ussuí.	Kikumoto	Yunosawa	1	[illegible]	2?	Sulphuretted gas.	[illegible]
"		Shiriyu	2	50°	10?	Sulphuretted gas.	Used
"	"		3	45°	5?	"	used
"	"		4	45°	[illegible]	"	bowls
[illegible]	[illegible]	[illegible]	5	46°	40?	Carbonic acid & Sulphuretted gas.	[illegible]
"	[illegible]	[illegible]	[illegible]	42½	30	Sulphuretted gas.	"
"	"	[illegible]	[illegible]	42	[illegible]	"	"
"	"	Kagaki	8	[illegible]	[illegible]	"	"
"	"	[illegible]	9	43	5½?	"	"
"	"		10	43	5½?	"	
"	"	[illegible]	11	43		"	
"	"	"	12	44	10?	"	"
"	"	"	13	44½		"	"
	"	[illegible]	14	43	5?	"	"
"	Suzawa	?	15	39	20?	"	[illegible]
"	"	?	16	40	15?	"	"
"	Kuchiwa	?		36	10?	"	"
Ebihara	Akama	[illegible]	18	30°			[illegible]
		[illegible]	19	[illegible]	5½?	[illegible]	[illegible]
	"	[illegible]	20	30	[illegible]		
		[illegible]	21	[illegible]	[illegible]	[illegible]	"

Kori.	Village.	Name.	No.	Hect. Culti. Dezia.	Tillab. Culti. Dezia.	Charac.	Rem.
"	"	Gotomoya	22		8?	Sulphur	"
"	"	Mangoya	23	51	3?	Sulphur	"
"	"	Sankoya	24	3	1?	Sulphur	"
"	"	Kidyoya	25	4	3?	Sulphur	"
"	"	Menoya	26	40½	16?	"	"
"	"	Alamoya	27	49	7?	Sulphur	"
"	"	Sakoya	28	62	5?	Sulphur	"
"	Yunoka	Yunoka	29				
"	"	"	30	42	10?	Pure	
"	"	"	31				
	"	Yoroya	32	23	2??	Sulphur	"
	"	Yujiroya	33	3	5??	Pure	"
Kori.	Ukkari	Jigokubira	34	61	5?	Copperas	"
"	Yunotoya	?	35	"	10?	"	"
	Ozaya	?	36	"	?	Sour?	"
"	Yunoto	?	37	73	10?	Sulphur	"
"	"	?	38	69	10?	"	
Kori.	Yuyoshi	?	39	61	10?	Sulphur	Yujiroya
Kawa	Yunoma	?	40				
"	"	?	41	41½	15??	Sulphur	
"	"	?	42				
"	"	?	43				

Ken.	Village.	Name.	No.	Heat	
Akizawa	Yamashita	?	4	48°	10.
"	"	?	5	46°	5?
"	"	?	6	45	½

Petroleum mineral springs

by which the district in the province of Kai is

Kubiki	Sekigawa	Akiyama	47		Sand.	dark smoky gas.	Hard
"	"	"	48	"	Lime.	do. do.	
Kubiki	Akasaka	Yamasawa	49	"	"	Sulphur. and gas.	Silver mine
"	"	"	50	"	"	do. do.	do.
"	Setogawa		51	"	"	Sour Copper	do.
Nishima		Ishi	52	"	"	" "	"
"	"	Yaya	53	"	"	Copperas?	"
						Sulphur.	
Kambara	Shirasaki		55	"	"	Salt.	"
"	Koyashi		56	"	Sand.	Salt?	"
"	Kurodzu		57	"	Lime	Salt.	"
			58	5??	Sand.	Rare	Oil "
							Oil?
"	Kurokawa		59	62	Lime	Salt.	Oil

No 17, Gordon, Hill [illegible] Edin, Kirkcaldy
19 March 1877.

Drummond Hay Esq.
[illegible] of Japan Mail, Yokohama.

Dear Sir

You can hardly feel surprised & annoyed at the slow progress made in publishing the report on yesterday's proceedings you had a month ago. Since that time you have succeeded with all the extraordinary efforts you promised only in getting me one single, first additional page of proof. You have now had the report in your hands, three months or more and have succeeded in printing only 64 or 66 pages; although, as I said before, the whole report would scarcely need more type than a single issue of your weekly paper. The type, indeed, if you had only chosen and will continue to fit printing presses, it seems as if you could within a month or two at any time have had a plenty of new ones cast or even imported for the purpose. I beg to know when I may look for the remaining proofs; and remain

Very truly yours,

Henry Smith Williams

Remarks.

No 1. — 2 miles (3.2 Km) N.W. of Bahamas near the road to Iriguy.

Nos 2, 3, 4. — [illegible] Temperature taken; bogus from Bahamas and 3 leagues from Indian Grade. No 3 is named a little with water from a well [illegible] close by. Nos 2 & 4.

No 5. — The Spring is a semicircular pool 10 feet in radius [illegible] Leaves no deposit. Green conferva and [illegible] is said, in a powerful [illegible] in the Spring. Baths are erected and good for [illegible] diseases.

Nos 6–10. — In the main village of Bacalao, within a space of 100 yards in length. The orthoclase at No 6 is a very beautiful porphyry and dips 70° S 30° W; but a little above by it the same rock is 75° S 20° W, and in the brook just [illegible] the rock seems to be S 80° W. All the springs [illegible] are closely covered up with earth and the temperature was taken at the outlet of the pipe leading to the bath.

Nos 11–14. — In a small separate village about [illegible] N.E. of Nos 6–10. Nos 11–13 are near together and simply into the same bath; No 14 is about [illegible] to the N.W. All four are [illegible] covered [illegible] temperature was taken [illegible] the [illegible]

The Beppu water is reckoned good for many diseases; for example, pains in the bones (rheumatism), hysteria, [illegible], general debility, etc.

At Kamegawa, one league southerly from Beppu, there are said to be two springs of the same nature and about the same temperature as those of Beppu.

At Kiriyama, two leagues and a half southerly from Beppu, there are said to be three springs of the same nature and about the same temperature as those of Beppu.

No. 15, 16. — The springs are covered up and the temperature was taken with the bath. The sulphur (sulphuretted hydrogen gas) is less than at Beppu.

No. 17. — Spring covered up; temperature taken at boiling close by. Sulphur [illegible].

No. 18 to 28. — All the springs seem to issue from the alluvium; but the rocks below are no doubt the Volcanic. No. 18 is called Wata no yu. No. 19, 20, 25, 26, 27 are covered up and the temperature was taken at the bath. Nos. 18, 21, 23, 28 contain a little sulphuretted hydrogen gas, and No. 24 part of a very little; the [illegible] smell nor deposit of sulphur, but appear to contain a trace of it.

No. 29, 31. [illegible] from Beppu, to leave from the foot of the [illegible].

covered up, temperature taken at back. Not taste, smell nor deposit of sulphur.

No 32. — Called Lukes Mineral spring 500? yds from No 29-31. North.

No 33. — 500? yds S.S.W. from No 29-31.

The rocks near Yumoto appear to be all Old Volcanic.

No 34. — Half a league from Horigawa near the road to Nakayama, and close by the natural gas place. There is a reddish iron mud deposit.

No 35. — A quarter of a mile back from Yamato guchi, and 100? yards from the natural gas place. There is a reddish iron mud deposit.

No 36. — Close by natural gas place. Called a mineral spring, but at the time of the visit it seemed to have no mineral taste; owing perhaps to the overflowing of a neighbouring brook.

No 37 38. — The springs are hidden and the temperature was taken at the bottom. Both have a very strong sulphuretted hydrogen smell and have a red deposit; No 38 has a red deposit and was white mud, but at the time of visit was yellow and contains sulphur. Near to the Old Volcanic.

No 39.— Three quarters of a league from Tupo
chio, back in the hills, near Chiapa. Water, good. The
substance around is much bedded and coarse.

No 40–43.— Half a mile from the same village
away from the river. The springs are all covered
up and the water carried by one pipe to the road
30 yards distant; and the temperature was taken at
the point. The sulphur is very little, but there is said
to be a little deposit.

No 44–46.— All within 50 yards in the village.
Temp. of 104 taken near the 44. There is no
smell nor taste but there is said to be a little

No 17, Yokohama, Hiradeura (Dec. 20 Lane 17.

Hon. S. R. Hall,
Kōfukuji, Yokohama.

Dear Sir:

It has given me great pleasure to receive the information contained in your [illegible] with its enclosed copy of the translation of a letter from the Kaikakudi to Mr. Matsudaira &c. &c. &c. that the Kaikakudi's request for the services of Mr. Takahashi has been withdrawn; and I have informed Mr. Takahashi that called [illegible] as you desire.

I am

My dear General,

Yours very truly,

Benj. Smith Lyman.

Geological Survey of the Oil Lands of Japan.

Report on the Mineral Springs Visited in 1876, Chiefly in Shinano and Echigo; by Henry Shirk Lyman, A.B. of Yale and Mining Engineer.

To
His Excellency H. Ito,
Public Works Minister.

Sir:

In fulfilment of the hope expressed at the end of my report to the Home Office at the last year's [illegible] over survey of the oil lands of Japan (written in January, before transfer of the survey to the Public Works Department), I beg to make you now the following report in tabular form of observations that I [illegible] mineral springs chiefly in Shinano and Echigo during my journey [illegible]

Nos 47, 48. — Obtained by Messrs Nagati and Ikeda. The gases are near together, and the gas is the so called oil gas of [illegible] (Gas is worked by somebody of that village) but it [illegible] different and has a different smell.

Nos 49, 50. — Obtained by Messrs. Nagai and Ikeda. The boring are near together. There is a [illegible] spring with a small [illegible] of sulphur.

No 51, 52. — Obtained by Messrs. Kada and [illegible] in [illegible] so called Kotoji.

No 53. — Obtained by Messrs. [illegible] and [illegible]

No 54. — Obtained by Messrs. [illegible] There is no deposit.

No 55. — [illegible] by Messrs. Nagai and [illegible]

There are many very small threads, [illegible] like all the

No 56.— Observed by Messrs. Knyphi and S. Maeda.

No 57.— Observed by Messrs Knyphi [illegible] opening is said to have been all formerly, but is now not the case now.

No 58.— Observed by Messrs. Kuwada and Ishikawa [illegible] opening [illegible]

No 59.— Observed by Messrs. Kuwada and Ishigawa [illegible] opening [illegible]

Messrs. Kuwada and Ishigawa were also told by the Japanese that opening in the [illegible] opening [illegible] were black and opening and [illegible] but did not know their character.

Messrs. [illegible] and S. Maeda also heard the [illegible] Messrs Kuwada & Ishigawa [illegible] could not learn its character.

Messrs Schlatter and Kanaboo heard of a white [illegible] opening at Mijikoji, but the Japanese [illegible] could not learn its character.

I may add that the Oil Bearing Formation [illegible] be of nearly, if not exactly, the same age as that of Ukiah, the Yorkibet Group; and consists of it mainly in the oil deposits and cold mineral springs, as well as to some degree in lithological character, apparently in fossils (though no careful comparison in this regard has yet been made) but in many localities of Tertiary Lignite. In [illegible] Tertiary Lignite is sometimes closely associated with Cache Creek coal. It seems [illegible] probable that the Formation may be at least in part somewhat older than the Yorkibet Group [illegible] perhaps covering a portion of the gap between the Ukiah Cache and the older Horizontal (or Coal Bearing) Group, and at any rate of Tertiary age.

The Old Volcanic Rocks of Ukiah and Lodoja would not seem to differ very much from those in Texas, but possibly may in part be a little newer. In some parts they would [illegible] age with the adjacent Oil Bearing [illegible] have to be so.

[illegible]

No 17. Confidential Circular No 2 to Colonels

Lieut. K. Y. (Name)

Chief Secretary to the Public Works Department
and Lt. Governor's Aides.

My dear Colonel.

I beg you will forward the
accompanying report as desired, as
you suggested last year, I have ventured to
add a few observations.

Yours

Hirakawa Ohio, 26 March, 1877.

Gen. K. P. Ord,

Kokubunji Ohio,

My dear General,

I beg to forward you herewith
a Schedule of the Salaries & Allowances of this
Office, prepared by Mr. S. Maeda, and am

Ms. dear General,

Very truly yours,

Dan. Crosby Greene

No. 17. Yokohama, Hiogo (Kobe) 27th [illegible]

Genl. K. S. Otori,

Korakuchiyo Cho.

Mydear General.

I beg to enclose you herewith a bill for your [illegible] ending 31st [illegible]

I beg also to [illegible] your approval of the following purchases:

		(Estimated prices)	
Office furniture:			
2000 Mineral trays @ 1¢		$20.00	
12 Hibachi and Stands @ 46¢		5.52	
6 pair Hibachi @ 4¢		.24	
1 Tobacco box @ 6¢		.06	
2 Bronze @ 2¢		.06	
2 Kutsubi @ 02¢		.040	
3 Pen @ 0.025		.075	
3 Pen @ 0.02		.075	$21.11
Surveying and Drawing Implements:			
200 Blank Note Book @ 25¢		50.00	
1 Ream Drawing paper (Mitsui)		20.00	70.00
			91.11

The mineral trays are small trays made of [illegible] covered with [illegible] for holding the specimens [illegible]

Collection of animals & birds, and are under-
used in the Natural Hist. Coll. — The Rhinoceros
have been already bought and in use a long time
at my own risk; as they were by an Order issued
from the Lieut. Gov. last November allowed by you on
the 4th Dec. 1875. — The Tabakoba are bound to use
leather becomes dear for fuel. The
and drawing paper will be especially needed in
the Museum Surveying: but to some extent will be
needed here very soon, as there is last year
nearly used up.

I beg further that the repairs of the Lecture Hall
for which £ you (October) may be allowed.

I am,

My dear General,

Very truly yours,

W. Smith Lyman.

P.S. I take the liberty of enclosing herewith the
Geographical notice of ... Gov. C.B.

Wakkanai Cho; 27 March, [illegible]

To the K. G. Otsu

Kōsaka Keizo Kucho.

Very dear Friend:

I beg to acknowledge receipt [illegible]
letter of the 27th ult., and am sorry to learn
how that they are [illegible]:

1 Kakinuma Fuko.
2 Jō Buko.
10 Makiguni.
10 Tudé.
[illegible] Handai
2 Jō Kanegami.
[illegible] Reed Kanegami.
5 boxes of 180 Reed Kanegami.
[illegible] Buko Handiki.
1 Home Shoji.
1 Bunch Hoshi.
1 Norikuba.
2 Midzuire.

Although the articles [illegible]
[illegible]

should be reckoned as part of the expence of our survey and no doubt they would be so reckoned however. It is also reasonable that we should be enabled to charge such items of expence in our account books, as that we may know the whole sum actually paid on our account and be able to make a compleat and trustworthy report of all the expences of the survey. I beg leave that we may be supplied with a statement of the cost of the above mentioned articles, so that it may be entered in our books at once. Such entering will give rise to no inconveniences nor misunderstandings; for, of course, we charge on one side of our account as much money as received by us and on the other side the same money as expended in the purchase of those articles; and the papers received from the Richmond Store stating the price and that they have been delivered & are properly stamped will serve as vouchers at the time of auditing our accounts, just as any receipts from a merchant would.

I am

My dear General,

Yours very truly

Hiakuna Okd, 28 March 18[illegible]

Genl K. S. Otori,
Kōtaku Kigyōsenchō.

My dear General.

I have had your letter from some accident of the Kuwanoto
Ōtori just received by my assistant
Wada, asking me to prepare and send
tomorrow an account of the expenses of our journey
to the first year. It would clearly be very improper
for us to be corresponding in that way directly with
the Kuwanotokiji; and I beg you will therefore
answer be made that if the Kuwanotokiji
should desire anything from us it will have the
kindness to ask it from the Kōtakuchō, and if the
Kōtakuchō should give us the necessary instructions
we shall be most happy to comply with the request
to the best of our [illegible].

As the Iwasa Bank would add that it would be
[illegible] be impossible to make out the accounts
as they are in a single day; but as soon as they shall be
[illegible] we will [illegible]

in view to the previous inefficiency of our accounts will no within a very few days be completely [illegible]. We shall then be able to show to you or any body whom you desire a connected statement of all the expenses of the year and in addition a classified statement according to the classes of last year's estimates. I suppose this mode of the classified statement [illegible] will be known amongst us and [illegible] if [illegible] with the [illegible] abandoning [illegible] conditions) by the [illegible] vouchers have been [illegible] both in the Navy and in the Ordnance [illegible] perhaps "speed the [illegible]" first after our books have been inspected by competent authority and required entries verified by comparison with the vouchers on file and the adding up of each page [illegible], it is only the classified brief statement [illegible] will be of any interest or worth copying.

I am,

My dear General,

Yours very truly,

Wm. Swift Lyman.

[illegible]

Hiratsuka Sho, 28th March, 1

Rev. H. T. Ohai,

Kobukuro Sho.

Dear Sir,

I beg to send the following
the list of things I wrote you yesterday as
from the Kobukuro Community.

I have to make
a request that we may be informed of
to do this and how it is to be.
I suppose you have some method of charging
in our Church which have hitherto been
to pay by each Order according to
received from the Church which we attached
Committee yesterday afternoon be many
which I have sent by us from the
all Church of Mr. Meeting and the
Meeting the Church of Mr. Hiratsuka
Church in any way from
might to Church desire from

at the time of making the article or once every month or more often, and either in cash or by draft on N.Y. or Phila. to be drawn in the Rotunda or Museum at the Library but in that way the Rotunda light, museum books and [illegible] would be long perhaps. I would be liberal in giving from any other resource, or like one paying postage & sending to the government. Or, in case could open an account [illegible] books with & settle the balance in favor of the Mus. could be paid by one draft of N. York or by a draft of Washington.

I am

My dear Barnum,

Yours very truly

[illegible]

235